

**Appendix 4.1-B**  
**Surface Water Quality Analytical Results**

Hydro ID	Sample Date	Lab Sample ID	Page
BVC01	07/07	R07070382-001	3
	08/07	R07080273-001	5
	09/07	R07090368-002	7
	10/07	R07100295-003	10
	11/07	R07110229-002	13
	12/07	R07120148-002	17
	12/07	R07120148-003	21
	01/08	R08010124-002	25
	03/08	R08030091-005	29
	04/08	R08040178-004	33
	05/08	R08050356-002	37
	06/08	R08060315-002	41
BVC04	07/07	R07070382-002	45
	08/07	R07080273-002	47
	09/07	R07100001-001	49
	10/07	R07100295-001	52
	11/07	R07110229-003	55
	12/07	R07120148-001	59
	01/08	R08010124-003	63
	03/08	R08030091-002	67
	03/08	R08030091-003	71
	04/08	R08040178-003	75
	05/08	R08050356-004	79
	06/08	R08060315-004	83
PSC01	07/07	R07070315-001	87
	07/08	R08070340-001	89
	07/08	R08070343-001	93
PSC02	07/07	R07070315-002	96
	07/08	R08070340-002	98
	07/08	R08070343-002	102
	07/08	R08070343-003	105
Sub01	03/08	R08030252-003	108
	06/08	R08060347-001	112
Sub02	09/07	R07090389-002	116
	11/07	R07110147-001	119
	02/08	R08020083-003	123
	06/08	R08060347-002	127
	06/08	R08060347-003	131
Sub03	11/07	R07110147-003	135
	06/08	R08060347-004	139
Sub04	11/07	R07110147-002	143
	06/08	R08060316-001	147
Sub06	09/07	R07090389-003	151
	11/07	R07110302-002	154
	02/08	R08020083-002	158
	06/08	R08060403-003	162

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07070382-001  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 09/03/07  
**Collection Date:** 07/24/07 14:20  
**Date Received:** 07/25/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	68	CFU/100ml	D	2		2	A9222 D	07/25/07 14:20/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	134	mg/L		5		1	A2320 B	08/01/07 09:51/jn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/01/07 09:51/jn
Bicarbonate as HCO3	163	mg/L		5		1	A2320 B	08/01/07 09:51/jn
Calcium	68.4	mg/L		0.5		1	E200.7	07/31/07 18:15/eli-c
Chloride	101	mg/L		1.0		20	E300.0	07/25/07 21:40/jmh
Fluoride	0.70	mg/L		0.10		1	E300.0	07/25/07 21:56/jmh
Magnesium	29.5	mg/L		0.5		1	E200.7	07/31/07 18:15/eli-c
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	07/25/07 21:56/jmh
Potassium	9.5	mg/L		0.5		1	E200.7	07/31/07 18:15/eli-c
Silica	2.7	mg/L		0.5		1	E200.7	07/31/07 18:15/eli-c
Sodium	213	mg/L		0.5		1	E200.7	07/31/07 18:15/eli-c
Sulfate	463	mg/L	D	14		20	E300.0	07/25/07 21:40/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1480	umhos/cm		5		1	A2510 B	07/31/07 18:05/jmh
pH	8.31	s.u.		0.01		1	A4500-H B	07/31/07 17:54/jmh
Solids, Suspended Sediment SSC @ 105 C	19	mg/L		5		1	D3977	07/26/07 15:31/jn
Solids, Total Dissolved TDS @ 180 C	950	mg/L		5		1	A2540 C	07/31/07 09:21/jn
Solids, Total Suspended TSS @ 105 C	27	mg/L		5		1	A2540 D	07/30/07 13:54/jn
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	08/02/07 01:40/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	08/02/07 01:40/eli-c
<b>METALS - TOTAL</b>								
Arsenic	0.002	mg/L		0.001		1	E200.8	08/01/07 19:36/eli-c
Barium	ND	mg/L		0.1		1	E200.8	08/01/07 19:36/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	07/31/07 18:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/01/07 19:36/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	08/01/07 19:36/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/01/07 19:36/eli-c
Iron	0.48	mg/L		0.03		1	E200.7	07/31/07 18:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/01/07 19:36/eli-c
Manganese	0.15	mg/L		0.01		1	E200.8	08/01/07 19:36/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/01/07 19:36/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 1 of 4



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07070382-001  
Client Sample ID: DewBurd BVC01

Report Date: 09/03/07  
Collection Date: 07/24/07 14:20  
Date Received: 07/25/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - TOTAL</b>								
Molybdenum	ND	mg/L		0.1		1	E200.8	08/01/07 19:36/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	08/01/07 19:36/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	08/01/07 19:36/eli-c
Silver	ND	mg/L		0.005		1	E200.8	08/01/07 19:36/eli-c
Uranium	0.0040	mg/L		0.0003		1	E200.8	08/01/07 19:36/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	08/01/07 19:36/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/01/07 19:36/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	5.9	pCi/L		1.0		1	E900.0	08/10/07 21:23/eli-c
Gross Alpha precision (±)	0.9	pCi/L				1	E900.0	08/10/07 21:23/eli-c
Gross Beta	10.3	pCi/L		2.0		1	E900.0	08/10/07 21:23/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	08/10/07 21:23/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	08/06/07 14:52/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.715	%				1	A1030 E	08/15/07 14:44/ADM
Anions	15.2	meq/L				1	A1030 E	08/15/07 14:44/ADM
Cations	15.4	meq/L				1	A1030 E	08/15/07 14:44/ADM
Solids, Total Dissolved Calculated	967	mg/L				1	A1030 E	08/15/07 14:44/ADM
TDS Balance (0.80 - 1.20)	0.980	dec. %				1	A1030 E	08/15/07 14:44/ADM

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07080273-001  
Client Sample ID: DewBurd BVC01

Report Date: 09/11/07  
Collection Date: 08/20/07 17:07  
Date Received: 08/21/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	2500	CFU/100ml	D	100		100	A9222 D	08/21/07 16:15/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	112	mg/L		5		1	A2320 B	09/01/07 14:22/jn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	09/01/07 14:22/jn
Bicarbonate as HCO3	137	mg/L		5		1	A2320 B	09/01/07 14:22/jn
Calcium	73.0	mg/L		0.5		1	E200.7	08/30/07 18:16/eli-c
Chloride	158	mg/L		1		20	E300.0	08/24/07 06:58/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	08/21/07 23:39/jmh
Magnesium	27.8	mg/L		0.5		1	E200.7	08/30/07 18:16/eli-c
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	08/21/07 23:39/jmh
Potassium	11.4	mg/L		0.5		1	E200.7	08/30/07 18:16/eli-c
Silica	6.2	mg/L		0.5		1	E200.7	08/30/07 18:16/eli-c
Sodium	263	mg/L		0.5		1	E200.7	08/30/07 18:16/eli-c
Sulfate	511	mg/L	D	10		20	E300.0	08/24/07 06:58/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1660	umhos/cm		5		1	A2510 B	08/24/07 10:16/jmh
pH	8.80	s.u.		0.01		1	A4500-H B	08/24/07 09:58/jmh
Solids, Suspended Sediment SSC @ 105 C	47	mg/L		5		1	D3977	08/30/07 09:35/jn
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		1	A2540 C	08/25/07 16:54/jmh
Solids, Total Suspended TSS @ 105 C	51	mg/L		5		1	A2540 D	08/24/07 12:18/jn
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		10	E200.8	09/01/07 23:59/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	09/01/07 23:59/eli-c
<b>METALS - TOTAL</b>								
Arsenic	0.002	mg/L		0.001		1	E200.8	09/02/07 01:33/eli-c
Barium	ND	mg/L		0.1		1	E200.8	09/02/07 01:33/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	08/30/07 18:16/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/02/07 01:33/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	09/02/07 01:33/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/02/07 01:33/eli-c
Iron	0.66	mg/L		0.03		1	E200.7	08/30/07 18:16/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	09/02/07 01:33/eli-c
Manganese	0.11	mg/L		0.01		1	E200.8	09/02/07 01:33/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/02/07 01:33/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 1 of 4

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07080273-001  
Client Sample ID: DewBurd BVC01

Report Date: 09/11/07  
Collection Date: 08/20/07 17:07  
Date Received: 08/21/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - TOTAL</b>								
Molybdenum	ND	mg/L		0.1		1	E200.8	09/02/07 01:33/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	09/02/07 01:33/eli-c
Selenium	0.003	mg/L		0.001		1	E200.8	09/02/07 01:33/eli-c
Silver	ND	mg/L		0.005		1	E200.8	09/02/07 01:33/eli-c
Uranium	0.0046	mg/L		0.0003		1	E200.8	09/02/07 01:33/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	09/02/07 01:33/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	09/02/07 01:33/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	7.1	pCi/L		1.0		1	E900.0	09/02/07 23:51/eli-c
Gross Alpha precision (±)	1.2	pCi/L				1	E900.0	09/02/07 23:51/eli-c
Gross Beta	14.7	pCi/L		2.0		1	E900.0	09/02/07 23:51/eli-c
Gross Beta precision (±)	2.8	pCi/L				1	E900.0	09/02/07 23:51/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	09/04/07 14:06/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	1.06	%				1	A1030 E	09/10/07 14:03/ADM
Anions	17.4	meq/L				1	A1030 E	09/10/07 14:03/ADM
Cations	17.8	meq/L				1	A1030 E	09/10/07 14:03/ADM
Solids, Total Dissolved Calculated	1120	mg/L				1	A1030 E	09/10/07 14:03/ADM
TDS Balance (0.80 - 1.20)	0.960	dec. %				1	A1030 E	09/10/07 14:03/ADM

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090368-002  
Client Sample ID: DewBurd BVC01

Report Date: 12/19/07  
Collection Date: 09/26/07 12:16  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	09/27/07 12:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	78	mg/L		5		1	A2320 B	10/04/07 16:34/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 16:34/sn
Bicarbonate as HCO3	85	mg/L		5		1	A2320 B	10/04/07 16:34/sn
Calcium	53	mg/L		1.0		10	E200.7	10/09/07 17:48/eli-c
Chloride	141	mg/L	D	2		50	E300.0	09/28/07 02:15/jmh
Fluoride	0.9	mg/L		0.1		1	E300.0	09/28/07 03:05/jmh
Magnesium	28	mg/L		1.0		10	E200.7	10/09/07 17:48/eli-c
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/28/07 03:05/jmh
Potassium	11	mg/L		1.0		1	E200.7	10/08/07 21:34/eli-c
Silica	3.8	mg/L		1.0		1	E200.7	10/08/07 21:34/eli-c
Sodium	242	mg/L	D	5.3		10	E200.7	10/08/07 19:52/eli-c
Sulfate	568	mg/L	D	40		50	E300.0	09/28/07 02:15/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1740	umhos/cm		5		1	A2510 B	10/02/07 18:26/jmh
pH	8.79	s.u.		0.01		1	A4500-H B	10/02/07 18:26/jmh
Solids, Suspended Sediment SSC @ 105 C	40	mg/L		5		1	D3977	10/05/07 08:38/jmh
Solids, Total Dissolved TDS @ 180 C	1200	mg/L		5		1	A2540 C	10/02/07 13:05/sn
Solids, Total Suspended TSS @ 105 C	31	mg/L		5		1	A2540 D	09/27/07 13:35/sn
<b>METALS - DISSOLVED</b>								
Uranium	0.0075	mg/L		0.0003		1	E200.8	10/24/07 15:47/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		10	E200.8	10/09/07 02:55/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	10/09/07 02:55/eli-c
<b>METALS - TOTAL</b>								
Arsenic	0.002	mg/L		0.001		1	E200.8	10/08/07 23:01/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/08/07 23:01/eli-c
Boron	0.21	mg/L		0.10		2	E200.7	10/09/07 21:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/08/07 23:01/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/08/07 23:01/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/08/07 23:01/eli-c
Iron	0.61	mg/L		0.03		1	E200.7	10/08/07 21:34/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090368-002  
Client Sample ID: DewBurd BVC01

Report Date: 12/19/07  
Collection Date: 09/26/07 12:16  
Date Received: 09/27/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - TOTAL</b>									
Lead	ND	mg/L		0.001			1	E200.8	10/08/07 23:01/eli-c
Manganese	0.20	mg/L		0.01			1	E200.8	10/08/07 23:01/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	10/08/07 23:01/eli-c
Molybdenum	ND	mg/L		0.1			1	E200.8	10/08/07 23:01/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	10/08/07 23:01/eli-c
Selenium	0.001	mg/L		0.001			1	E200.8	10/08/07 23:01/eli-c
Silver	ND	mg/L		0.005			1	E200.8	10/08/07 23:01/eli-c
Thorium 232	ND	mg/L		0.005			1	E200.8	10/08/07 23:01/eli-c
Uranium	0.0076	mg/L		0.0003			1	E200.8	10/08/07 23:01/eli-c
Vanadium	ND	mg/L		0.1			1	E200.8	10/08/07 23:01/eli-c
Zinc	ND	mg/L		0.01			2	E200.7	10/09/07 21:41/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	12/10/07 19:38/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	12/10/07 19:38/eli-c
Thorium 230	ND	pCi/L		0.20			1	E907.0	12/10/07 19:38/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	10/24/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	10/25/07 16:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	10/30/07 13:34/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	10/26/07 10:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	6.6	pCi/L		1.0			1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	1.2	pCi/L					1	E900.0	10/12/07 01:09/eli-c
Gross Beta	9.4	pCi/L		2.0			1	E900.0	10/12/07 01:09/eli-c
Gross Beta precision (±)	2.9	pCi/L					1	E900.0	10/12/07 01:09/eli-c
Lead 210	ND	pCi/L		1.0			1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	10/15/07 12:20/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	10/29/07 11:00/eli-c
<b>DATA QUALITY</b>									
A/C Balance (± 5)	-4.61	%					1	A1030 E	12/10/07 19:55/eli-c
Anions	17.4	meq/L					1	A1030 E	12/10/07 19:55/eli-c
Cations	15.9	meq/L					1	A1030 E	12/10/07 19:55/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07090368-002  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 12/19/07  
**Collection Date:** 09/26/07 12:16  
**Date Received:** 09/27/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>DATA QUALITY</b>								
Solids, Total Dissolved Calculated	1090	mg/L				1	A1030 E	12/10/07 19:55/eli-c
TDS Balance (0.80 - 1.20)	1.08	dec. %				1	A1030 E	12/10/07 19:55/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 6 of 12



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100295-003  
Client Sample ID: DewBurdBVC01

Report Date: 12/26/07  
Collection Date: 10/17/07 14:45  
Date Received: 10/18/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	76	CFU/100ml	D	2		2	A9222 D	10/18/07 10:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	112	mg/L		5		1	A2320 B	10/29/07 14:35/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/29/07 14:35/sn
Bicarbonate as HCO3	137	mg/L		5		1	A2320 B	10/29/07 14:35/sn
Calcium	314	mg/L		1		10	E200.7	11/02/07 16:25/eli-c
Chloride	852	mg/L	D	2		50	E300.0	10/24/07 15:57/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	10/20/07 00:57/jmh
Magnesium	141	mg/L		1		10	E200.7	11/02/07 16:25/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/25/07 17:01/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/20/07 00:57/jmh
Potassium	15	mg/L		1		1	E200.7	11/02/07 17:08/eli-c
Silica	ND	mg/L		1		1	E200.7	11/02/07 17:08/eli-c
Sodium	950	mg/L	D	8		10	E200.7	11/02/07 16:25/eli-c
Sulfate	2180	mg/L	D	40		50	E300.0	10/24/07 15:57/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	5750	umhos/cm		5		1	A2510 B	10/31/07 16:17/jmh
pH	7.84	s.u.		0.01		1	A4500-H B	10/24/07 12:31/jmh
Sodium Adsorption Ratio (SAR)	11	unitless		0.10		1	Calculation	11/05/07 10:15/eli-c
Solids, Suspended Sediment SSC @ 105 C	4510	mg/L		5		1	D3977	10/26/07 16:13/sn
Solids, Total Dissolved TDS @ 180 C	4600	mg/L		5		1	A2540 C	10/19/07 14:08/jmh
Solids, Total Suspended TSS @ 105 C	ND	mg/L		5		1	A2540 D	10/24/07 14:46/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/24/07 04:06/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/24/07 04:06/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/24/07 04:06/eli-c
Boron	0.3	mg/L		0.1		1	E200.7	11/02/07 17:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/24/07 04:06/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/24/07 04:06/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/24/07 04:06/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/02/07 17:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/24/07 04:06/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	10/24/07 04:06/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/24/07 04:06/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/24/07 04:06/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 7 of 12

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100295-003  
Client Sample ID: DewBurdBVC01

Report Date: 12/26/07  
Collection Date: 10/17/07 14:45  
Date Received: 10/18/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	10/24/07 04:06/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/24/07 04:06/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/24/07 04:06/eli-c
Uranium	0.0097	mg/L		0.0003		1	E200.8	10/24/07 04:06/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/24/07 04:06/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/24/07 04:06/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	10/29/07 19:03/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	10/29/07 19:03/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.1	mg/L		0.1		1	E200.8	10/24/07 14:26/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/24/07 14:26/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/24/07 14:26/eli-c
Boron	0.3	mg/L		0.1		1	E200.7	11/02/07 17:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/24/07 14:26/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/24/07 14:26/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	10/18/07 09:30/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/16/07 15:26/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/24/07 14:26/eli-c
Iron	0.13	mg/L		0.03		1	E200.7	11/02/07 17:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/24/07 14:26/eli-c
Manganese	0.16	mg/L		0.01		1	E200.8	10/24/07 14:26/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/24/07 14:26/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/24/07 14:26/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/24/07 14:26/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/24/07 14:26/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/24/07 14:26/eli-c
Uranium	0.0097	mg/L		0.0003		1	E200.8	10/24/07 14:26/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/24/07 14:26/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/24/07 14:26/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	11/02/07 11:49/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/31/07 10:21/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/31/07 10:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 8 of 12



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100295-003  
Client Sample ID: DewBurdBVC01

Report Date: 12/26/07  
Collection Date: 10/17/07 14:45  
Date Received: 10/18/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	ND	mg/L		0.001			1	A3114 B	11/02/07 11:58/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	10/31/07 10:29/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	10/31/07 10:30/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	11/01/07 08:25/eli-c
Polonium 210	2.6	pCi/L		1.0			1	RMO-3008	11/16/07 13:00/eli-c
Polonium 210 precision (±)	1.6	pCi/L					1	RMO-3008	11/16/07 13:00/eli-c
Radium 226	0.3	pCi/L		0.2			1	E903.0	11/05/07 10:59/eli-c
Radium 226 precision (±)	0.2	pCi/L					1	E903.0	11/05/07 10:59/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	11/02/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	11/09/07 09:45/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	11/06/07 13:30/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	11/07/07 16:49/eli-c
Thorium 230	0.7	pCi/L		0.2			1	E907.0	10/31/07 15:00/eli-c
Thorium 230 precision (±)	0.4	pCi/L					1	E907.0	10/31/07 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	12.0	pCi/L		1.0			1	E900.0	11/09/07 13:02/eli-c
Gross Alpha precision (±)	2.5	pCi/L					1	E900.0	11/09/07 13:02/eli-c
Gross Beta	2.7	pCi/L		2.0			1	E900.0	11/09/07 13:02/eli-c
Gross Beta precision (±)	7.0	pCi/L					1	E900.0	11/09/07 13:02/eli-c
Gross Gamma	ND	pCi/L		20.0			1	E901.1	10/23/07 19:30/eli-c
<b>DATA QUALITY</b>									
A/C Balance (± 5)	-1.92	%					1	A1030 E	12/16/07 15:37/eli-c
Anions	71.6	meq/L					1	A1030 E	12/16/07 15:37/eli-c
Cations	68.9	meq/L					1	A1030 E	12/16/07 15:37/eli-c
Solids, Total Dissolved Calculated	4520	mg/L					1	A1030 E	12/16/07 15:37/eli-c
TDS Balance (0.80 - 1.20)	1.02	dec. %					1	A1030 E	12/16/07 15:37/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 9 of 12





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-002  
Client Sample ID: DewBurdBVC01

Report Date: 01/29/08  
Collection Date: 11/19/07 11:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	30	CFU/100ml	D	2		2	A9222 D	11/20/07 09:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	196	mg/L		5		1	A2320 B	12/03/07 15:48/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/03/07 15:48/sn
Bicarbonate as HCO3	239	mg/L		5		1	A2320 B	12/03/07 15:48/sn
Calcium	379	mg/L	D	1		10	E200.7	12/03/07 16:56/eli-c
Chloride	1370	mg/L	D	4		100	E300.0	11/21/07 19:48/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/20/07 22:01/jmh
Magnesium	209	mg/L		0.5		1	E200.7	12/04/07 16:52/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/29/07 16:38/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/20/07 22:01/jmh
Potassium	11	mg/L		1		10	E200.7	12/03/07 16:56/eli-c
Silica	1.6	mg/L		0.5		1	E200.7	12/04/07 16:52/eli-c
Sodium	1240	mg/L	D	8		10	E200.7	12/03/07 16:56/eli-c
Sulfate	2540	mg/L	D	70		100	E300.0	11/21/07 19:48/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	7290	umhos/cm		5.0		1	A2510 B	11/26/07 15:31/jmh
pH	7.77	s.u.		0.01		1	A4500-H B	11/26/07 15:07/jmh
Sodium Adsorption Ratio (SAR)	13	meq/L		0.10		1	Calculation	12/24/07 14:51/sec
Solids, Suspended Sediment SSC @ 105 C	20	mg/L		5		1	D3977	11/27/07 15:14/jmh
Solids, Total Dissolved TDS @ 180 C	6100	mg/L		5		1	A2540 C	11/26/07 15:46/jmh
Solids, Total Suspended TSS @ 105 C	20	mg/L		5		1	A2540 D	11/19/07 19:01/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		10	E200.8	11/27/07 00:08/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	11/27/07 00:08/eli-c
Barium	ND	mg/L		0.1		10	E200.8	11/27/07 00:08/eli-c
Boron	0.6	mg/L		0.1		1	E200.7	12/04/07 16:52/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	11/27/07 00:08/eli-c
Chromium	ND	mg/L		0.01		10	E200.8	11/27/07 00:08/eli-c
Copper	ND	mg/L		0.01		10	E200.8	11/27/07 00:08/eli-c
Iron	0.18	mg/L		0.03		1	E200.7	12/04/07 16:52/eli-c
Lead	ND	mg/L		0.001		10	E200.8	11/27/07 00:08/eli-c
Manganese	0.23	mg/L		0.01		10	E200.8	11/27/07 00:08/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/27/07 00:08/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	11/27/07 00:08/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-002  
Client Sample ID: DewBurdBVC01

Report Date: 01/29/08  
Collection Date: 11/19/07 11:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		10	E200.8	11/27/07 00:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/27/07 23:59/eli-c
Thorium 232	ND	mg/L		0.005		10	E200.8	11/27/07 00:08/eli-c
Uranium	0.0182	mg/L		0.0003		10	E200.8	11/27/07 00:08/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	11/27/07 00:08/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	11/27/07 00:08/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	12/03/07 13:31/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	12/03/07 13:31/eli-c
<b>METALS - TOTAL</b>								
Aluminum	ND	mg/L		0.1		5	E200.8	11/29/07 23:36/eli-c
Arsenic	ND	mg/L		0.001		5	E200.8	11/29/07 04:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/27/07 23:06/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	12/04/07 17:06/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/27/07 23:06/eli-c
Chromium	ND	mg/L		0.05		5	E200.8	11/29/07 04:32/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	11/20/07 17:55/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/24/07 14:52/sec
Copper	ND	mg/L		0.01		5	E200.8	11/29/07 04:32/eli-c
Iron	0.05	mg/L		0.03		1	E200.7	12/04/07 17:06/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/26/07 16:36/eli-c
Manganese	0.18	mg/L		0.01		5	E200.8	11/29/07 04:32/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/27/07 23:06/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/27/07 23:06/eli-c
Nickel	ND	mg/L		0.05		5	E200.8	11/29/07 04:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/27/07 23:06/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/26/07 16:36/eli-c
Uranium	0.0180	mg/L		0.0003		1	E200.8	11/26/07 16:36/eli-c
Vanadium	ND	mg/L		0.1		5	E200.8	11/29/07 04:32/eli-c
Zinc	0.03	mg/L		0.01		5	E200.8	11/29/07 04:32/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	12/03/07 15:01/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:42/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-002  
Client Sample ID: DewBurdBVC01

Report Date: 01/29/08  
Collection Date: 11/19/07 11:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	12/03/07 15:10/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:51/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	4.6	pCi/L		1.0		1	E909.0M	11/27/07 08:00/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	11/27/07 08:00/eli-c
Polonium 210	1.9	pCi/L		1.0		1	RMO-3008	11/28/07 12:30/eli-c
Polonium 210 precision (±)	1.4	pCi/L				1	RMO-3008	11/28/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/04/07 15:46/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/29/07 14:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/04/07 11:15/eli-c
Polonium 210	2.5	pCi/L		1.0		1	RMO-3008	12/05/07 12:00/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	12/05/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/11/07 09:36/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/05/07 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	65.8	pCi/L		1.0		1	E900.0	12/06/07 20:59/eli-c
Gross Alpha precision (±)	6.6	pCi/L				1	E900.0	12/06/07 20:59/eli-c
Gross Beta	44.4	pCi/L		2.0		1	E900.0	12/06/07 20:59/eli-c
Gross Beta precision (±)	14.1	pCi/L				1	E900.0	12/06/07 20:59/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	11/28/07 11:35/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	11/28/07 11:35/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Lead 210	4.6	pCi/L		1.0		1	E909.0M	12/24/07 11:00/eli-c
Lead 210 precision (±)	1.7	pCi/L				1	E909.0M	12/24/07 11:00/eli-c
Polonium 210	4.4	pCi/L		1.0		1	RMO-3008	12/24/07 11:00/eli-c
Polonium 210 precision (±)	2.1	pCi/L				1	RMO-3008	12/24/07 11:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/24/07 11:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/24/07 11:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-2.71	%				1	A1030 E	12/24/07 14:56/sec
Anions	95.3	meq/L				1	A1030 E	12/24/07 14:56/sec

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-002  
Client Sample ID: DewBurdBVC01

Report Date: 01/29/08  
Collection Date: 11/19/07 11:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>DATA QUALITY</b>								
Cations	90.3	meq/L				1	A1030 E	12/24/07 14:56/sec
Solids, Total Dissolved Calculated	5860	mg/L				1	A1030 E	12/24/07 14:56/sec
TDS Balance (0.80 - 1.20)	1.04	dec. %				1	A1030 E	12/24/07 14:56/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-002  
**Client Sample ID:** DewBurdBVC01

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 12:20  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	6	CFU/100ml	D	2		2	A9222 D	12/12/07 09:45/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	188	mg/L		5		1	A2320 B	12/18/07 18:54/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/18/07 18:54/sn
Bicarbonate as HCO3	229	mg/L		5		1	A2320 B	12/18/07 18:54/sn
Calcium	452	mg/L	D	1		10	E200.7	12/27/07 13:50/eli-c
Chloride	581	mg/L	D	2		50	E300.0	12/14/07 02:48/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	12/13/07 19:21/jmh
Magnesium	110	mg/L		0.5		10	E200.7	12/27/07 13:50/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/19/07 14:24/sn
Nitrogen, Nitrate as N	0.3	mg/L		0.1		1	E300.0	12/13/07 19:21/jmh
Potassium	5	mg/L		1		2	E200.7	12/27/07 15:40/eli-c
Silica	11.0	mg/L		0.5		10	E200.7	12/27/07 13:50/eli-c
Sodium	426	mg/L	D	8		10	E200.7	12/27/07 13:50/eli-c
Sulfate	1430	mg/L	D	40		50	E300.0	12/14/07 02:48/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	4370	umhos/cm		5.0		1	A2510 B	12/15/07 18:38/jmh
pH	7.88	s.u.		0.01		1	A4500-H B	12/15/07 19:05/jmh
Sodium Adsorption Ratio (SAR)	4.7	meq/L		0.10		1	Calculation	01/23/08 16:29/sec
Solids, Suspended Sediment SSC @ 105 C	13	mg/L		5		1	D3977	12/17/07 17:37/jmh
Solids, Total Dissolved TDS @ 180 C	3500	mg/L		5		1	A2540 C	12/13/07 15:06/jmh
Solids, Total Suspended TSS @ 105 C	10	mg/L		5		1	A2540 D	12/12/07 17:16/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	12/18/07 05:28/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	12/18/07 05:28/eli-c
Barium	ND	mg/L		0.1		1	E200.8	12/18/07 05:28/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	12/27/07 15:40/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	12/18/07 05:28/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	12/18/07 05:28/eli-c
Copper	ND	mg/L		0.01		1	E200.8	12/18/07 05:28/eli-c
Iron	ND	mg/L		0.03		2	E200.7	12/27/07 15:40/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/18/07 05:28/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	12/18/07 05:28/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/26/07 15:40/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	12/18/07 05:28/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 5 of 19

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-002  
**Client Sample ID:** DewBurdBVC01

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 12:20  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED</b>							
Nickel	ND	mg/L		0.01		1	E200.8 12/18/07 05:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8 12/18/07 05:28/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 12/18/07 05:28/eli-c
Uranium	0.0124	mg/L		0.0003		1	E200.8 12/18/07 05:28/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8 12/18/07 05:28/eli-c
Zinc	ND	mg/L		0.01		1	E200.8 12/18/07 05:28/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001		1	E200.8 12/23/07 11:04/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8 12/23/07 11:04/eli-c
<b>METALS - TOTAL</b>							
Aluminum	0.2	mg/L		0.1		1	E200.8 12/20/07 01:23/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8 12/20/07 01:23/eli-c
Barium	ND	mg/L		0.1		1	E200.8 12/20/07 01:23/eli-c
Boron	0.2	mg/L		0.1		2	E200.7 12/27/07 15:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8 12/20/07 01:23/eli-c
Chromium	ND	mg/L		0.05		1	E200.8 12/20/07 01:23/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B 12/12/07 17:57/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation 01/23/08 16:35/sec
Copper	ND	mg/L		0.01		1	E200.8 12/20/07 01:23/eli-c
Iron	0.25	mg/L		0.03		2	E200.7 12/27/07 15:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8 12/20/07 01:23/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8 12/20/07 01:23/eli-c
Mercury	ND	mg/L		0.001		1	E200.8 12/21/07 19:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8 12/20/07 01:23/eli-c
Nickel	ND	mg/L		0.05		1	E200.8 12/20/07 01:23/eli-c
Silver	ND	mg/L		0.005		1	E200.8 12/21/07 19:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 12/20/07 01:23/eli-c
Uranium	0.0142	mg/L		0.0003		1	E200.8 12/20/07 01:23/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8 12/20/07 01:23/eli-c
Zinc	ND	mg/L		0.01		1	E200.8 12/20/07 01:23/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	0.002	mg/L		0.001		1	A3114 B 12/30/07 10:36/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 12/29/07 09:45/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B 12/30/07 11:58/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 6 of 19





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07120148-002  
Client Sample ID: DewBurdBVC01

Report Date: 02/04/08  
Collection Date: 12/11/07 12:20  
Date Received: 12/12/07  
Matrix: AQUEOUS

Table with columns: Analyses, Result, Units, Qual, RL, MCL/QCL, DF, Method, Analysis Date / By. Rows include METALS - TOTAL - SPECIATED, RADIONUCLIDES - DISSOLVED, RADIONUCLIDES - SUSPENDED, RADIONUCLIDES - TOTAL, and RADIONUCLIDES - TOTAL - CALCULATED.

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-002  
**Client Sample ID:** DewBurdBVC01

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 12:20  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.412	%				1	A1030 E	01/23/08 16:26/sec
Anions	49.8	meq/L				1	A1030 E	01/23/08 16:26/sec
Cations	50.3	meq/L				1	A1030 E	01/23/08 16:26/sec
Solids, Total Dissolved Calculated	3110	mg/L				1	A1030 E	01/23/08 16:26/sec
TDS Balance (0.80 - 1.20)	1.14	dec. %				1	A1030 E	01/23/08 16:26/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 8 of 19





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07120148-003  
Client Sample ID: DewBurdBVC01

Report Date: 02/04/08  
Collection Date: 12/11/07 12:25  
Date Received: 12/12/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	14	CFU/100ml	D	2		2	A9222 D	12/12/07 09:45/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	184	mg/L		5		1	A2320 B	12/18/07 18:55/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/18/07 18:55/sn
Bicarbonate as HCO3	224	mg/L		5		1	A2320 B	12/18/07 18:55/sn
Calcium	451	mg/L	D	1		10	E200.7	12/27/07 13:53/eli-c
Chloride	610	mg/L	D	2		50	E300.0	12/14/07 03:04/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	12/13/07 19:36/jmh
Magnesium	109	mg/L		0.5		10	E200.7	12/27/07 13:53/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/19/07 14:25/sn
Nitrogen, Nitrate as N	0.3	mg/L		0.1		1	E300.0	12/13/07 19:36/jmh
Potassium	6	mg/L		1		2	E200.7	12/27/07 15:44/eli-c
Silica	11.0	mg/L		0.5		10	E200.7	12/27/07 13:53/eli-c
Sodium	412	mg/L	D	8		10	E200.7	12/27/07 13:53/eli-c
Sulfate	1510	mg/L	D	40		50	E300.0	12/14/07 03:04/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	4380	umhos/cm		5.0		1	A2510 B	12/15/07 18:39/jmh
pH	7.89	s.u.		0.01		1	A4500-H B	12/15/07 19:06/jmh
Sodium Adsorption Ratio (SAR)	4.5	meq/L		0.10		1	Calculation	01/23/08 16:29/sec
Solids, Suspended Sediment SSC @ 105 C	13	mg/L		5		1	D3977	12/17/07 17:37/jmh
Solids, Total Dissolved TDS @ 180 C	3500	mg/L		5		1	A2540 C	12/13/07 15:08/jmh
Solids, Total Suspended TSS @ 105 C	12	mg/L		5		1	A2540 D	12/12/07 17:17/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	12/18/07 05:35/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	12/18/07 05:35/eli-c
Barium	ND	mg/L		0.1		1	E200.8	12/18/07 05:35/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	12/27/07 15:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	12/18/07 05:35/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	12/18/07 05:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	12/18/07 05:35/eli-c
Iron	ND	mg/L		0.03		2	E200.7	12/27/07 15:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/18/07 05:35/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	12/18/07 05:35/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/26/07 15:46/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	12/18/07 05:35/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 9 of 19

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07120148-003  
Client Sample ID: DewBurdBVC01

Report Date: 02/04/08  
Collection Date: 12/11/07 12:25  
Date Received: 12/12/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	0.01	mg/L		0.01		1	E200.8	12/18/07 05:35/eli-c
Silver	ND	mg/L		0.005		1	E200.8	12/18/07 05:35/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	12/18/07 05:35/eli-c
Uranium	0.0129	mg/L		0.0003		1	E200.8	12/18/07 05:35/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	12/18/07 05:35/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	12/18/07 05:35/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	12/23/07 11:11/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8	12/23/07 11:11/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.2	mg/L		0.1		1	E200.8	12/20/07 01:29/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	12/20/07 01:29/eli-c
Barium	ND	mg/L		0.1		1	E200.8	12/20/07 01:29/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	12/27/07 16:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	12/20/07 01:29/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	12/20/07 01:29/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	12/12/07 17:59/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	01/23/08 16:35/sec
Copper	ND	mg/L		0.01		1	E200.8	12/20/07 01:29/eli-c
Iron	0.28	mg/L		0.03		2	E200.7	12/27/07 16:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/20/07 01:29/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	12/20/07 01:29/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/21/07 19:27/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	12/20/07 01:29/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	12/20/07 01:29/eli-c
Silver	ND	mg/L		0.005		1	E200.8	12/21/07 19:27/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	12/20/07 01:29/eli-c
Uranium	0.0151	mg/L		0.0003		1	E200.8	12/20/07 01:29/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	12/20/07 01:29/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	12/20/07 01:29/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	12/30/07 10:38/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/29/07 09:47/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	12/30/07 11:58/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 10 of 19



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07120148-003  
Client Sample ID: DewBurdBVC01

Report Date: 02/04/08  
Collection Date: 12/11/07 12:25  
Date Received: 12/12/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	0.001	mg/L		0.001			1	A3114 B	12/30/07 11:14/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	12/29/07 10:34/eli-c
Selenium-VI	0.001	mg/L		0.001			1	A3114 B	12/30/07 11:58/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	12/21/07 06:15/eli-c
Polonium 210	1.4	pCi/L		1.0			1	RMO-3008	12/20/07 12:30/eli-c
Polonium 210 precision (±)	1.2	pCi/L					1	RMO-3008	12/20/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	12/27/07 22:46/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	12/27/07 15:15/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	4.4	pCi/L		1.0			1	E909.0M	12/26/07 10:30/eli-c
Lead 210 precision (±)	1.0	pCi/L					1	E909.0M	12/26/07 10:30/eli-c
Polonium 210	1.2	pCi/L		1.0			1	RMO-3008	01/02/08 16:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L					1	RMO-3008	01/02/08 16:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	12/31/07 11:00/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	12/27/07 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	25.8	pCi/L		1.0			1	E900.0	01/02/08 20:21/eli-c
Gross Alpha precision (±)	2.8	pCi/L					1	E900.0	01/02/08 20:21/eli-c
Gross Beta	5.7	pCi/L		2.0			1	E900.0	01/02/08 20:21/eli-c
Gross Beta precision (±)	7.0	pCi/L					1	E900.0	01/02/08 20:21/eli-c
Gross Gamma	1120	pCi/L		20.0			1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	174	pCi/L					1	E901.1	12/05/07 10:50/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	4.4	pCi/L		1.0			1	E909.0M	01/05/08 14:23/sec
Lead 210 precision (±)	1.0	pCi/L					1	E909.0M	01/05/08 14:23/sec
Polonium 210	2.6	pCi/L		1.0			1	RMO-3008	01/07/08 15:00/sec
Polonium 210 precision (±)	1.6	pCi/L					1	RMO-3008	01/07/08 15:00/sec
Radium 226	ND	pCi/L		0.2			1	E903.0	01/05/08 14:23/sec
Thorium 230	ND	pCi/L		0.2			1	E907.0	01/11/08 16:40/sec
<b>DATA QUALITY</b>									
A/C Balance (± 5)	ND	%					1	A1030 E	01/23/08 16:27/sec
Anions	52.3	meq/L					1	A1030 E	01/23/08 16:27/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc

**Project:** Edgemont

**Lab ID:** R07120148-003

**Client Sample ID:** DewBurdBVC01

**Report Date:** 02/04/08

**Collection Date:** 12/11/07 12:25

**Date Received:** 12/12/07

**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>DATA QUALITY</b>								
Cations	49.6	meq/L					1	A1030 E 01/23/08 16:27/sec
Solids, Total Dissolved Calculated	3210	mg/L					1	A1030 E 01/23/08 16:27/sec
TDS Balance (0.80 - 1.20)	1.10	dec. %					1	A1030 E 01/23/08 16:27/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 12 of 19



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08010124-002  
Client Sample ID: DewBurdBVC01

Report Date: 02/29/08  
Collection Date: 01/11/08 11:15  
Date Received: 01/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	16	CFU/100ml	D	2		2	A9222 D	01/11/08 18:15/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	214	mg/L		5		1	A2320 B	01/21/08 16:03/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	01/21/08 16:03/sn
Bicarbonate as HCO3	261	mg/L		5		1	A2320 B	01/21/08 16:03/sn
Calcium	499	mg/L	D	1		10	E200.7	01/24/08 15:25/eli-c
Chloride	208	mg/L	D	2		50	E300.0	01/12/08 22:52/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	01/12/08 23:07/jmh
Magnesium	114	mg/L		0.5		1	E200.7	01/24/08 16:23/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	01/14/08 16:11/sn
Nitrogen, Nitrate as N	0.4	mg/L		0.1		1	E300.0	01/12/08 23:07/jmh
Potassium	5	mg/L		1		1	E200.7	01/24/08 16:23/eli-c
Silica	13.0	mg/L		0.5		1	E200.7	01/24/08 16:23/eli-c
Sodium	182	mg/L	D	8		10	E200.7	01/24/08 15:25/eli-c
Sulfate	1470	mg/L	D	40		50	E300.0	01/12/08 22:52/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3140	umhos/cm		5.0		1	A2510 B	01/17/08 16:55/jmh
pH	7.68	s.u.		0.01		1	A4500-H B	01/17/08 17:06/jmh
Sodium Adsorption Ratio (SAR)	1.9	unitless		0.10		1	Calculation	02/05/08 13:40/sec
Solids, Suspended Sediment SSC @ 105 C	12	mg/L		5		1	D3977	01/17/08 14:46/jmh
Solids, Total Dissolved TDS @ 180 C	2900	mg/L		5		1	A2540 C	01/16/08 10:05/sn
Solids, Total Suspended TSS @ 105 C	12	mg/L		5		1	A2540 D	01/16/08 10:50/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	01/20/08 23:14/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	01/17/08 18:15/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/17/08 18:15/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	01/24/08 16:23/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/17/08 18:15/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	01/20/08 23:14/eli-c
Copper	ND	mg/L		0.01		1	E200.8	01/17/08 18:15/eli-c
Iron	ND	mg/L		0.03		1	E200.7	01/24/08 16:23/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/17/08 18:15/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	01/20/08 23:14/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	01/17/08 18:15/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	01/17/08 18:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08010124-002  
**Client Sample ID:** DewBurdBVC01

**Report Date:** 02/29/08  
**Collection Date:** 01/11/08 11:15  
**Date Received:** 01/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	01/17/08 18:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	01/17/08 18:15/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/17/08 18:15/eli-c
Uranium	0.0134	mg/L		0.0003		1	E200.8	01/17/08 18:15/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	01/17/08 18:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/17/08 18:15/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	01/20/08 21:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	01/20/08 21:39/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.3	mg/L		0.1		1	E200.8	01/20/08 16:54/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	01/20/08 16:54/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/20/08 16:54/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	01/24/08 16:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/20/08 16:54/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	01/20/08 16:54/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	01/12/08 10:44/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	02/05/08 13:49/sec
Copper	ND	mg/L		0.01		1	E200.8	01/20/08 16:54/eli-c
Iron	0.29	mg/L		0.03		1	E200.7	01/24/08 16:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/20/08 16:54/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	01/20/08 16:54/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	01/20/08 16:54/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	01/20/08 16:54/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	01/20/08 16:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8	01/20/08 16:54/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/20/08 16:54/eli-c
Uranium	0.0139	mg/L		0.0003		1	E200.8	01/20/08 16:54/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	01/20/08 16:54/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/20/08 16:54/eli-c
Calcium	506	mg/L	D	0.8		10	E200.7	01/24/08 16:13/eli-c
Magnesium	121	mg/L		0.5		1	E200.7	01/24/08 16:32/eli-c
Potassium	5.3	mg/L		0.5		1	E200.7	01/24/08 16:32/eli-c
Silica	14.6	mg/L		0.1		1	E200.7	01/24/08 16:32/eli-c
Sodium	191	mg/L		0.5		1	E200.7	01/24/08 16:32/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 6 of 12





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08010124-002  
Client Sample ID: DewBurdBVC01

Report Date: 02/29/08  
Collection Date: 01/11/08 11:15  
Date Received: 01/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium	0.003	mg/L		0.001			1	A3114 B	01/17/08 12:35/eli-ca
Selenium-IV	ND	mg/L		0.001			1	A3114 B	01/17/08 09:51/eli-ca
Selenium-VI	0.003	mg/L		0.001			1	A3114 B	01/17/08 13:11/eli-ca
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	0.003	mg/L		0.001			1	A3114 B	01/21/08 13:52/eli-ca
Selenium-IV	ND	mg/L		0.001			1	A3114 B	01/21/08 11:15/eli-ca
Selenium-VI	0.003	mg/L		0.001			1	A3114 B	01/21/08 14:21/eli-ca
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	01/17/08 11:45/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	01/21/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	01/29/08 16:57/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	01/17/08 16:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	01/21/08 11:30/eli-c
Polonium 210	1.4	pCi/L		1.0			1	RMO-3008	01/21/08 14:00/eli-c
Polonium 210 precision (±)	1.1	pCi/L					1	RMO-3008	01/21/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	01/28/08 11:26/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	01/21/08 14:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	12.6	pCi/L		1.0			1	E900.0	01/23/08 09:33/eli-c
Gross Alpha precision (±)	1.9	pCi/L					1	E900.0	01/23/08 09:33/eli-c
Gross Beta	4.1	pCi/L		2.0			1	E900.0	01/23/08 09:33/eli-c
Gross Beta precision (±)	4.6	pCi/L					1	E900.0	01/23/08 09:33/eli-c
Gross Gamma	ND	pCi/L		20.0			1	E901.1	01/17/08 16:36/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	02/05/08 17:18/sec
Polonium 210	1.4	pCi/L		1.0			1	RMO-3008	02/05/08 17:18/sec
Polonium 210 precision (±)	1.1	pCi/L					1	RMO-3008	02/05/08 17:18/sec
Radium 226	ND	pCi/L		0.2			1	E903.0	02/05/08 17:18/sec
Thorium 230	ND	pCi/L		0.2			1	E907.0	02/05/08 17:18/sec
<b>DATA QUALITY</b>									
A/C Balance (± 5)	1.85	%					1	A1030 E	02/05/08 13:42/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08010124-002  
**Client Sample ID:** DewBurdBVC01

**Report Date:** 02/29/08  
**Collection Date:** 01/11/08 11:15  
**Date Received:** 01/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>DATA QUALITY</b>									
Anions	40.8	meq/L					1	A1030 E	02/05/08 13:42/sec
Cations	42.3	meq/L					1	A1030 E	02/05/08 13:42/sec
Solids, Total Dissolved Calculated	2610	mg/L					1	A1030 E	02/05/08 13:42/sec
TDS Balance (0.80 - 1.20)	1.09	dec. %					1	A1030 E	02/05/08 13:42/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 8 of 12





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030091-005  
Client Sample ID: DewBurd BVC01

Report Date: 07/29/08  
Collection Date: 03/09/08 15:15  
Date Received: 03/10/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	03/10/08 11:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	214	mg/L		5		1	A2320 B	03/17/08 15:04/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/17/08 15:04/sn
Bicarbonate as HCO3	261	mg/L		5		1	A2320 B	03/17/08 15:04/sn
Calcium	308	mg/L		0.5		5	E200.7	04/10/08 20:53/eli-b
Chloride	113	mg/L	D	5		50	E300.0	03/12/08 12:01/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	03/12/08 12:17/jmh
Magnesium	129	mg/L		0.5		5	E200.7	04/10/08 20:53/eli-b
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	03/14/08 16:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	03/12/08 12:17/jmh
Potassium	12	mg/L		1		5	E200.7	04/10/08 20:53/eli-b
Sodium	864	mg/L		0.5		5	E200.7	04/10/08 20:53/eli-b
Sulfate	2490	mg/L	D	3		50	E300.0	03/12/08 12:01/jmh
Silica	6.9	mg/L		0.2		5	E200.7	04/10/08 20:53/eli-b
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	5000	umhos/cm		5.0		1	A2510 B	03/12/08 15:31/jmh
pH	8.10	s.u.		0.01		1	A4500-H B	03/12/08 13:25/jmh
Sodium Adsorption Ratio (SAR)	10	Unitless		0.10		1	Calculation	04/10/08 20:53/krs
Solids, Suspended Sediment SSC @ 105 C	11	mg/L		5		1	D3977	03/10/08 12:23/jmh
Solids, Total Dissolved TDS @ 180 C	4300	mg/L		5		1	A2540 C	03/10/08 11:50/jmh
Solids, Total Suspended TSS @ 105 C	12	mg/L		5		1	A2540 D	03/11/08 14:13/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		5	E200.7	04/10/08 20:53/eli-b
Arsenic	ND	mg/L		0.001		1	E200.8	04/04/08 01:28/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/04/08 01:28/eli-c
Boron	0.2	mg/L		0.1		5	E200.7	04/10/08 20:53/eli-b
Cadmium	ND	mg/L		0.005		1	E200.8	04/04/08 01:28/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	04/04/08 01:28/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/04/08 01:28/eli-c
Iron	ND	mg/L		0.03		5	E200.7	04/10/08 20:53/eli-b
Lead	ND	mg/L		0.001		1	E200.8	04/04/08 01:28/eli-c
Manganese	0.32	mg/L		0.01		1	E200.8	04/04/08 01:28/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/04/08 01:28/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	04/04/08 01:28/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.

Page 17 of 24



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-005  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 15:15  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	0.01	mg/L		0.01		1	E200.8	04/04/08 01:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/04/08 01:28/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/04/08 01:28/eli-c
Uranium	0.0269	mg/L		0.0003		1	E200.8	04/04/08 01:28/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/04/08 01:28/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/04/08 01:28/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	03/28/08 18:45/eli-c
Uranium	0.0009	mg/L		0.0003		1	E200.8	03/28/08 18:45/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.3	mg/L		0.1		2	E200.7	04/12/08 02:13/eli-b
Arsenic	ND	mg/L		0.001		1	E200.8	04/11/08 20:49/eli-b
Barium	ND	mg/L		0.1		1	E200.8	04/11/08 20:49/eli-b
Boron	0.2	mg/L		0.1		2	E200.7	04/12/08 02:13/eli-b
Cadmium	ND	mg/L		0.005		1	E200.8	04/11/08 20:49/eli-b
Chromium	ND	mg/L		0.05		1	E200.8	04/11/08 20:49/eli-b
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	03/10/08 00:00/jmh
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	05/08/08 10:46/krs
Copper	ND	mg/L		0.01		1	E200.8	04/11/08 20:49/eli-b
Iron	0.44	mg/L		0.03		2	E200.7	04/12/08 02:13/eli-b
Lead	ND	mg/L		0.001		1	E200.8	04/11/08 20:49/eli-b
Manganese	0.36	mg/L		0.01		1	E200.8	04/11/08 20:49/eli-b
Mercury	ND	mg/L		0.001		1	E200.8	04/11/08 20:49/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/11/08 20:49/eli-b
Nickel	ND	mg/L		0.05		1	E200.8	04/11/08 20:49/eli-b
Silver	ND	mg/L		0.005		1	E200.8	04/11/08 20:49/eli-b
Thorium 232	ND	mg/L		0.005		1	E200.8	04/11/08 20:49/eli-b
Uranium	0.0262	mg/L		0.0003		1	E200.8	04/11/08 20:49/eli-b
Vanadium	ND	mg/L		0.1		1	E200.8	04/11/08 20:49/eli-b
Zinc	ND	mg/L		0.01		1	E200.8	04/11/08 20:49/eli-b
Calcium	295	mg/L		0.5		2	E200.7	04/12/08 02:13/eli-b
Magnesium	127	mg/L		0.5		2	E200.7	04/12/08 02:13/eli-b
Potassium	11.3	mg/L		0.5		2	E200.7	04/12/08 02:13/eli-b
Sodium	876	mg/L	D	2		2	E200.7	04/12/08 02:13/eli-b
Silica	8.2	mg/L		0.2		2	E200.7	04/12/08 02:13/eli-b

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

**Report Definitions:**  
 MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030091-005  
Client Sample ID: DewBurd BVC01

Report Date: 07/29/08  
Collection Date: 03/09/08 15:15  
Date Received: 03/10/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	03/19/08 11:20/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/19/08 09:23/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/19/08 12:04/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	03/19/08 11:42/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/19/08 09:47/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/19/08 12:04/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226	-0.02	pCi/L	U			1	E903.0	03/26/08 11:40/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/26/08 11:40/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	03/26/08 11:40/eli-c
Thorium 230	0.0	pCi/L		0.2		1	E907.0	04/04/08 15:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/04/08 15:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	-0.7	pCi/L	U			1	E903.0	04/01/08 13:23/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	04/01/08 13:23/eli-c
Radium 226 MDC	1.2	pCi/L				1	E903.0	04/01/08 13:23/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	03/26/08 15:15/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	03/26/08 15:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	17.4	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Alpha precision (±)	11.6	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Alpha MDC	17.2	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Beta	12.5	pCi/L	U			1	E900.0	04/02/08 20:04/eli-c
Gross Beta precision (±)	11.2	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Beta MDC	18.4	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	03/14/08 16:57/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	03/14/08 16:57/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	-0.7	pCi/L	U			1	E903.0	04/21/08 13:54/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	04/21/08 13:54/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	04/20/08 17:48/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	04/20/08 17:48/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level. Page 19 of 24  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-005  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 15:15  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	03/24/08 12:37/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.65	%				1	A1030 E	05/09/08 07:49/krs
Anions	59.4	meq/L				1	A1030 E	05/09/08 07:49/krs
Cations	63.9	meq/L				1	A1030 E	05/09/08 07:49/krs
Solids, Total Dissolved Calculated	4070	mg/L				1	A1030 E	05/09/08 07:49/krs
TDS Balance (0.80 - 1.20)	1.04	dec. %				1	A1030 E	05/09/08 07:49/krs

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 20 of 24



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040178-004  
Client Sample ID: DewBurd BVC01

Report Date: 06/24/08  
Collection Date: 04/14/08 18:43  
Date Received: 04/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	04/15/08 11:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	160	mg/L		5		1	A2320 B	04/16/08 12:24/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/16/08 12:24/mb
Bicarbonate as HCO3	195	mg/L		5		1	A2320 B	04/16/08 12:24/mb
Calcium	425	mg/L		0.5		2	E200.7	05/06/08 17:00/eli-c
Chloride	973	mg/L	D	5		50	E300.0	04/16/08 20:45/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	04/16/08 21:31/jmh
Magnesium	127	mg/L		0.5		2	E200.7	05/05/08 11:40/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/17/08 14:40/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/16/08 21:31/jmh
Potassium	10	mg/L		1		2	E200.7	05/05/08 11:40/eli-c
Silica	2.1	mg/L		0.5		2	E200.7	05/05/08 11:40/eli-c
Sodium	625	mg/L		0.5		2	E200.7	05/05/08 11:40/eli-c
Sulfate	1570	mg/L	D	3		50	E300.0	04/16/08 20:45/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	5340	umhos/cm		5.0		1	A2510 B	04/21/08 16:57/jmh
pH	8.09	s.u.		0.01		1	A4500-H B	04/21/08 16:31/jmh
Sodium Adsorption Ratio (SAR)	6.8	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Suspended Sediment SSC @ 105 C	19	mg/L		5		1	D3977	04/23/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	3800	mg/L		5		1	A2540 C	04/18/08 14:21/mb
Solids, Total Suspended TSS @ 105 C	17	mg/L		5		1	A2540 D	04/16/08 08:26/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 11:40/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	05/07/08 00:50/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/06/08 17:00/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	05/05/08 11:40/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 00:50/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	05/05/08 11:40/eli-c
Copper	ND	mg/L		0.01		2	E200.7	05/05/08 11:40/eli-c
Iron	ND	mg/L		0.03		2	E200.7	05/05/08 11:40/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 00:50/eli-c
Manganese	0.83	mg/L		0.01		2	E200.7	05/05/08 11:40/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 00:50/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 11:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040178-004  
Client Sample ID: DewBurd BVC01

Report Date: 06/24/08  
Collection Date: 04/14/08 18:43  
Date Received: 04/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		2	E200.7	05/06/08 17:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 00:50/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 00:50/eli-c
Uranium	0.0125	mg/L		0.0003		1	E200.8	05/07/08 00:50/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 11:40/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/05/08 11:40/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	05/01/08 20:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/01/08 20:38/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.5	mg/L		0.1		2	E200.7	04/29/08 00:19/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	04/26/08 01:26/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/29/08 00:19/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	04/29/08 00:19/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/26/08 01:26/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	04/26/08 01:26/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	04/15/08 00:00/ch
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	06/17/08 00:00/ADM
Copper	ND	mg/L		0.01		1	E200.8	04/26/08 01:26/eli-c
Iron	0.52	mg/L		0.03		2	E200.7	04/29/08 00:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/26/08 01:26/eli-c
Manganese	0.98	mg/L		0.01		1	E200.8	04/26/08 01:26/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	04/26/08 01:26/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	04/26/08 01:26/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/26/08 01:26/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/26/08 01:26/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/26/08 01:26/eli-c
Uranium	0.0127	mg/L		0.0003		1	E200.8	04/26/08 01:26/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/26/08 01:26/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/26/08 01:26/eli-c
Calcium	381	mg/L		0.5		2	E200.7	04/29/08 00:19/eli-c
Magnesium	128	mg/L		0.5		2	E200.7	04/29/08 00:19/eli-c
Potassium	13.0	mg/L		0.5		2	E200.7	04/29/08 00:19/eli-c
Silica	4.8	mg/L		0.5		2	E200.7	04/29/08 00:19/eli-c
Sodium	659	mg/L		0.5		2	E200.7	04/29/08 00:19/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
 Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040178-004  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 06/24/08  
**Collection Date:** 04/14/08 18:43  
**Date Received:** 04/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	04/18/08 14:35/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/18/08 10:53/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/18/08 15:15/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	04/18/08 14:52/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	04/18/08 11:10/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	04/18/08 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226	0.1	pCi/L	U			1	E903.0	05/06/08 09:47/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	05/06/08 09:47/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	05/06/08 09:47/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0	04/25/08 11:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	04/25/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	0.0	pCi/L	U			1	E903.0	05/05/08 11:17/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	05/05/08 11:17/eli-c
Radium 226 MDC	0.8	pCi/L				1	E903.0	05/05/08 11:17/eli-c
Thorium 230	0.8	pCi/L				1	E907.0	04/21/08 15:00/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	04/21/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	15.1	pCi/L				1	E900.0	05/09/08 01:51/eli-c
Gross Alpha precision (±)	9.6	pCi/L				1	E900.0	05/09/08 01:51/eli-c
Gross Alpha MDC	13.9	pCi/L				1	E900.0	05/09/08 01:51/eli-c
Gross Beta	-27.1	pCi/L	U			1	E900.0	05/09/08 01:51/eli-c
Gross Beta precision (±)	10.3	pCi/L				1	E900.0	05/09/08 01:51/eli-c
Gross Beta MDC	18.1	pCi/L				1	E900.0	05/09/08 01:51/eli-c
Gross Gamma	0.0	pCi/L	U	20.0		1	E901.1	04/21/08 16:56/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	04/21/08 16:56/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	0.1	pCi/L	U			1	E903.0	05/28/08 18:43/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0	05/28/08 18:43/eli-c
Thorium 230	1.1	pCi/L		0.2		1	E907.0	05/28/08 18:43/eli-c
Thorium 230 precision (±)	0.5	pCi/L				1	E907.0	05/28/08 18:43/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040178-004  
Client Sample ID: DewBurd BVC01

Report Date: 06/24/08  
Collection Date: 04/14/08 18:43  
Date Received: 04/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.001		1	E245.1	04/24/08 16:51/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-3.44					1	A1030 E	06/17/08 00:00/ADM
Anions	63.4	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	59.2	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	3840	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.990					1	A1030 E	06/17/08 00:00/ADM

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 16 of 16

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050356-002  
Client Sample ID: DewBurd BVC01

Report Date: 07/30/08  
Collection Date: 05/26/08 14:00  
Date Received: 05/27/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	5700	CFU/100ml	D	100		100	A9222 D	05/27/08 12:40/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	84	mg/L		5		1	A2320 B	06/02/08 11:05/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/02/08 11:05/mb
Bicarbonate as HCO3	102	mg/L		5		1	A2320 B	06/02/08 11:05/mb
Calcium	75.5	mg/L		0.5		2	E200.7	06/16/08 19:08/eli-c
Chloride	38	mg/L	D	5		50	E300.0	05/28/08 20:47/jmh
Chloride	24	mg/L		1		5	E300.0	05/29/08 23:44/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	05/28/08 21:03/jmh
Magnesium	17.2	mg/L		0.5		2	E200.7	06/16/08 19:08/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	05/28/08 13:35/jmh
Nitrogen, Nitrate as N	0.6	mg/L		0.1		1	E300.0	05/28/08 21:03/jmh
Potassium	7	mg/L		1		2	E200.7	06/16/08 19:08/eli-c
Silica	2.9	mg/L		0.5		2	E200.7	06/16/08 19:08/eli-c
Sodium	93	mg/L	D	2		2	E200.7	06/16/08 19:08/eli-c
Sulfate	317	mg/L	D	3		50	E300.0	05/28/08 20:47/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	908	umhos/cm		5.0		1	A2510 B	05/29/08 15:08/tb
pH	7.69	s.u.		0.01		1	A4500-H B	05/29/08 14:12/tb
Sodium Adsorption Ratio (SAR)	2.5	unitless		0.10		1	Calculation	07/21/08 11:31/ADM
Solids, Suspended Sediment SSC @ 105 C	4840	mg/L		5		1	D3977	05/29/08 16:04/mb
Solids, Total Dissolved TDS @ 180 C	620	mg/L		5		1	A2540 C	05/30/08 11:53/mb
Solids, Total Suspended TSS @ 105 C	4600	mg/L		5		1	A2540 D	05/28/08 09:21/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	06/16/08 19:08/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	06/22/08 18:45/eli-c
Barium	ND	mg/L		0.1		2	E200.7	06/16/08 19:08/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/16/08 19:08/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	06/22/08 18:45/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	06/16/08 19:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	06/22/08 18:45/eli-c
Iron	ND	mg/L		0.03		2	E200.7	06/16/08 19:08/eli-c
Lead	ND	mg/L		0.001		1	E200.8	06/22/08 18:45/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	06/16/08 19:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	06/22/08 18:45/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/16/08 19:08/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08050356-002  
Client Sample ID: DewBurd BVC01

Report Date: 07/30/08  
Collection Date: 05/26/08 14:00  
Date Received: 05/27/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		2	E200.7	06/16/08 19:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/22/08 18:45/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/22/08 18:45/eli-c
Uranium	0.0020	mg/L		0.0003		1	E200.8	06/22/08 18:45/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 19:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 19:08/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.013	mg/L		0.001		1	E200.8	06/23/08 11:21/eli-c
Uranium	0.0031	mg/L		0.0003		1	E200.8	06/23/08 11:21/eli-c
<b>METALS - TOTAL</b>								
Aluminum	99.3	mg/L		0.1		2	E200.7	06/12/08 18:20/eli-c
Arsenic	0.048	mg/L		0.001		5	E200.8	06/14/08 00:14/eli-c
Barium	1.1	mg/L		0.1		2	E200.7	06/12/08 18:20/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	06/12/08 18:20/eli-c
Cadmium	ND	mg/L		0.005		5	E200.8	06/14/08 00:14/eli-c
Chromium	0.19	mg/L		0.05		2	E200.7	06/12/08 18:20/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	05/27/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	07/21/08 00:00/jmh
Copper	0.11	mg/L		0.01		2	E200.7	06/12/08 18:20/eli-c
Iron	137	mg/L	D	0.2		2	E200.7	06/12/08 18:20/eli-c
Lead	0.088	mg/L		0.001		5	E200.8	06/14/08 00:14/eli-c
Manganese	1.82	mg/L		0.01		2	E200.7	06/12/08 18:20/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/12/08 18:20/eli-c
Nickel	0.15	mg/L		0.05		2	E200.7	06/12/08 18:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 21:22/eli-c
Thorium 232	0.040	mg/L		0.005		5	E200.8	06/14/08 00:14/eli-c
Uranium	0.0109	mg/L		0.0003		5	E200.8	06/14/08 00:14/eli-c
Vanadium	0.4	mg/L		0.1		2	E200.7	06/12/08 18:20/eli-c
Zinc	0.54	mg/L		0.01		2	E200.7	06/12/08 18:20/eli-c
Calcium	132	mg/L		0.5		2	E200.7	06/12/08 18:20/eli-c
Magnesium	59.8	mg/L		0.5		2	E200.7	06/12/08 18:20/eli-c
Potassium	37.4	mg/L		0.5		2	E200.7	06/12/08 18:20/eli-c
Silica	51.9	mg/L		0.5		2	E200.7	06/12/08 18:20/eli-c
Sodium	99	mg/L	D	1		2	E200.7	06/12/08 18:20/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	06/20/08 15:52/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050356-002  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 07/30/08  
**Collection Date:** 05/26/08 14:00  
**Date Received:** 05/27/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium-IV	0.002	mg/L		0.001		1	A3114 B	06/20/08 10:50/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:37/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:26/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	-1	pCi/L	U			1	E909.0M	07/08/08 11:20/eli-c
Lead 210 MDC	9.6	pCi/L				1	E909.0M	07/08/08 11:20/eli-c
Lead 210 precision (±)	5.7	pCi/L				1	E909.0M	07/08/08 11:20/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	06/17/08 12:00/eli-c
Polonium 210 precision (±)	0.90	pCi/L				1	RMO-3008	06/17/08 12:00/eli-c
Radium 226	2.0	pCi/L				1	E903.0	06/19/08 00:49/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	06/19/08 00:49/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	06/19/08 00:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	06/16/08 13:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	15.3	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	42.4	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	70.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	3.0	pCi/L		1.0		1	RMO-3008	06/25/08 17:27/eli-c
Polonium 210 precision (±)	3.3	pCi/L				1	RMO-3008	06/25/08 17:27/eli-c
Radium 226	3.1	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 precision (±)	1.6	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 MDC	2.0	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Thorium 230	3.4	pCi/L		0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	1.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	18.2	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	4.0	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	4.5	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	12.7	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	3.3	pCi/L				1	E900.0	06/28/08 01:42/eli-c

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

**MCL - Maximum contaminant level.**  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050356-002  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 07/30/08  
**Collection Date:** 05/26/08 14:00  
**Date Received:** 05/27/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>RADIONUCLIDES - TOTAL</b>								
Gross Beta MDC	5.1	pCi/L					1 E900.0	06/28/08 01:42/eli-c
Gross Gamma	0.0	pCi/L	U	20.0			1 E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	20	pCi/L					1 E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Lead 210	14	pCi/L	U				1 E909.0M	07/18/08 17:46/eli-c
Lead 210 precision (±)	43	pCi/L					1 E909.0M	07/18/08 17:46/eli-c
Polonium 210	3.3	pCi/L		1.0			1 RMO-3008	07/18/08 17:46/eli-c
Polonium 210 precision (±)	3.4	pCi/L					1 RMO-3008	07/18/08 17:46/eli-c
Radium 226	5.1	pCi/L					1 E903.0	07/18/08 17:46/eli-c
Radium 226 precision (±)	1.6	pCi/L					1 E903.0	07/18/08 17:46/eli-c
Thorium 230	3.4	pCi/L		0.2			1 E907.0	07/18/08 17:46/eli-c
Thorium 230 precision (±)	1.1	pCi/L					1 E907.0	07/18/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001			1 E245.1	06/17/08 11:22/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.0500	%					1 A1030 E	07/21/08 00:00/jmh
Anions	9.42	meq/L					1 A1030 E	07/21/08 00:00/jmh
Cations	9.43	meq/L					1 A1030 E	07/21/08 00:00/jmh
Solids, Total Dissolved Calculated	609	mg/L					1 A1030 E	07/21/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.01						1 A1030 E	07/21/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060315-002  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 08/15/08  
**Collection Date:** 06/17/08 11:05  
**Date Received:** 06/18/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	44	CFU/100ml	D	2		2	A9222 D	06/18/08 10:55/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	156	mg/L		5		1	A2320 B	06/25/08 10:34/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 10:34/mb
Bicarbonate as HCO3	190	mg/L		5		1	A2320 B	06/25/08 10:34/mb
Calcium	358	mg/L		0.5		2	E200.7	07/08/08 18:32/eli-c
Chloride	970	mg/L	D	10		100	E300.0	06/20/08 22:59/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	06/19/08 18:59/jmh
Magnesium	124	mg/L		0.5		2	E200.7	07/08/08 18:32/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/19/08 11:58/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/19/08 18:59/jmh
Potassium	8	mg/L		1		2	E200.7	07/08/08 18:32/eli-c
Silica	2.2	mg/L		0.5		2	E200.7	07/08/08 18:32/eli-c
Sodium	856	mg/L	D	2		2	E200.7	07/08/08 18:32/eli-c
Sulfate	1410	mg/L	D	3		50	E300.0	06/19/08 18:42/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	5140	umhos/cm		5.0		1	A2510 B	06/19/08 14:39/tb
pH	8.13	s.u.		0.01		1	A4500-H B	06/19/08 11:50/tb
Sodium Adsorption Ratio (SAR)	9.9	unitless		0.10		1	Calculation	07/30/08 09:24/ADM
Solids, Suspended Sediment SSC @ 105 C	59	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	4000	mg/L		5		1	A2540 C	06/18/08 15:38/mb
Solids, Total Suspended TSS @ 105 C	100	mg/L		5		1	A2540 D	06/18/08 15:05/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	07/08/08 18:32/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	07/17/08 16:10/eli-c
Barium	0.1	mg/L		0.1		2	E200.7	07/08/08 18:32/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	07/08/08 18:32/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 16:10/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	07/08/08 18:32/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/17/08 16:10/eli-c
Iron	0.03	mg/L		0.03		2	E200.7	07/08/08 18:32/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/17/08 16:10/eli-c
Manganese	0.73	mg/L		0.01		2	E200.7	07/08/08 18:32/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/17/08 16:10/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 18:32/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

Page 5 of 16





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060315-002  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 08/15/08  
**Collection Date:** 06/17/08 11:05  
**Date Received:** 06/18/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL DF		
<b>METALS - DISSOLVED</b>							
Nickel	ND	mg/L		0.01	2	E200.7	07/08/08 18:32/eli-c
Silver	ND	mg/L		0.005	1	E200.8	07/17/08 16:10/eli-c
Thorium 232	ND	mg/L		0.005	1	E200.8	07/17/08 16:10/eli-c
Uranium	0.0092	mg/L		0.0003	1	E200.8	07/17/08 16:10/eli-c
Vanadium	ND	mg/L		0.1	2	E200.7	07/08/08 18:32/eli-c
Zinc	ND	mg/L		0.01	2	E200.7	07/08/08 18:32/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001	1	E200.8	07/17/08 22:25/eli-c
Uranium	ND	mg/L		0.0003	1	E200.8	07/17/08 22:25/eli-c
<b>METALS - TOTAL</b>							
Aluminum	4.3	mg/L		0.1	2	E200.7	07/08/08 22:39/eli-c
Arsenic	0.004	mg/L	D	0.002	1	E200.8	07/17/08 07:31/eli-c
Barium	0.1	mg/L		0.1	2	E200.7	07/08/08 22:39/eli-c
Boron	0.4	mg/L		0.1	2	E200.7	07/08/08 22:39/eli-c
Cadmium	ND	mg/L		0.005	1	E200.8	07/17/08 07:31/eli-c
Chromium	ND	mg/L		0.05	2	E200.7	07/08/08 22:39/eli-c
Chromium, Hexavalent	ND	mg/L		0.005	1	A3500-Cr B	06/18/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01	1	Calculation	07/30/08 00:00/jmh
Copper	ND	mg/L		0.01	2	E200.7	07/08/08 22:39/eli-c
Iron	3.02	mg/L		0.03	2	E200.7	07/08/08 22:39/eli-c
Lead	0.002	mg/L		0.001	1	E200.8	07/17/08 07:31/eli-c
Manganese	0.97	mg/L		0.01	2	E200.7	07/08/08 22:39/eli-c
Molybdenum	ND	mg/L		0.1	2	E200.7	07/08/08 22:39/eli-c
Nickel	ND	mg/L		0.05	2	E200.7	07/08/08 22:39/eli-c
Silver	ND	mg/L		0.005	1	E200.8	07/17/08 21:24/eli-c
Thorium 232	ND	mg/L		0.005	1	E200.8	07/17/08 07:31/eli-c
Uranium	0.0113	mg/L		0.0003	1	E200.8	07/17/08 07:31/eli-c
Vanadium	ND	mg/L		0.1	2	E200.7	07/08/08 22:39/eli-c
Zinc	0.02	mg/L		0.01	2	E200.7	07/08/08 22:39/eli-c
Calcium	362	mg/L		0.5	2	E200.7	07/08/08 22:39/eli-c
Magnesium	130	mg/L		0.5	2	E200.7	07/08/08 22:39/eli-c
Potassium	8.8	mg/L		0.5	2	E200.7	07/08/08 22:39/eli-c
Silica	12.9	mg/L		0.5	2	E200.7	07/08/08 22:39/eli-c
Sodium	902	mg/L	D	1	2	E200.7	07/08/08 22:39/eli-c

**METALS - DISSOLVED - SPECIATED**

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060315-002  
Client Sample ID: DewBurd BVC01

Report Date: 08/15/08  
Collection Date: 06/17/08 11:05  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1	A3114 B 07/19/08 14:31/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 07/19/08 11:31/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1	A3114 B 07/22/08 14:51/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 07/22/08 11:06/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Radium 226	-0.02	pCi/L	U			1	E903.0 07/19/08 18:40/eli-c
Radium 226 precision (±)	0.06	pCi/L				1	E903.0 07/19/08 18:40/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0 07/19/08 18:40/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0 07/16/08 20:29/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0 07/16/08 20:29/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Radium 226	-0.9	pCi/L	U			1	E903.0 07/15/08 14:46/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0 07/15/08 14:46/eli-c
Radium 226 MDC	1.1	pCi/L				1	E903.0 07/15/08 14:46/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0 07/13/08 18:14/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0 07/13/08 18:14/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	8.9	pCi/L	U			1	E900.0 07/22/08 12:23/eli-c
Gross Alpha precision (±)	10.9	pCi/L				1	E900.0 07/22/08 12:23/eli-c
Gross Alpha MDC	17.1	pCi/L				1	E900.0 07/22/08 12:23/eli-c
Gross Beta	-11.1	pCi/L	U			1	E900.0 07/22/08 12:23/eli-c
Gross Beta precision (±)	11.6	pCi/L				1	E900.0 07/22/08 12:23/eli-c
Gross Beta MDC	19.8	pCi/L				1	E900.0 07/22/08 12:23/eli-c
Gross Gamma	0.0	pCi/L	U	20.0		1	E901.1 06/20/08 16:37/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1 06/20/08 16:37/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>							
Radium 226	-0.95	pCi/L	U	0.2		1	E903.0 07/28/08 15:32/eli-c
Radium 226 precision (±)	0.5	pCi/L				1	E903.0 07/28/08 15:32/eli-c
Thorium 230	0.3	pCi/L		0.2		1	E907.0 07/28/08 15:32/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0 07/28/08 15:32/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060315-002  
**Client Sample ID:** DewBurd BVC01

**Report Date:** 08/15/08  
**Collection Date:** 06/17/08 11:05  
**Date Received:** 06/18/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	06/30/08 08:46/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.51	%				1	A1030 E	07/30/08 00:00/jmh
Anions	59.9	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	65.6	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	3830	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.04					1	A1030 E	07/30/08 00:00/jmh

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 8 of 16



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07070382-002  
Client Sample ID: DewBurd BVC04

Report Date: 09/03/07  
Collection Date: 07/24/07 15:30  
Date Received: 07/25/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	110	CFU/100ml	D	2		2	A9222 D	07/25/07 14:20/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	80	mg/L		5		1	A2320 B	08/01/07 09:55/jn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	08/01/07 09:55/jn
Bicarbonate as HCO3	98	mg/L		5		1	A2320 B	08/01/07 09:55/jn
Calcium	146	mg/L		0.5		1	E200.7	07/31/07 18:22/eli-c
Chloride	251	mg/L		1.0		20	E300.0	07/25/07 22:11/jmh
Fluoride	0.45	mg/L		0.10		1	E300.0	07/25/07 22:26/jmh
Magnesium	47.7	mg/L		0.5		1	E200.7	07/31/07 18:22/eli-c
Nitrogen, Nitrate as N	ND	mg/L		0.10		1	E300.0	07/25/07 22:26/jmh
Potassium	10	mg/L		0.5		1	E200.7	07/31/07 18:22/eli-c
Silica	7.9	mg/L		0.5		1	E200.7	07/31/07 18:22/eli-c
Sodium	404	mg/L		0.5		1	E200.7	07/31/07 18:22/eli-c
Sulfate	859	mg/L	D	14		20	E300.0	07/25/07 22:11/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2660	umhos/cm		5		1	A2510 B	07/31/07 18:06/jmh
pH	7.72	s.u.		0.01		1	A4500-H B	07/31/07 17:55/jmh
Solids, Suspended Sediment SSC @ 105 C	111	mg/L		5		1	D3977	07/26/07 15:32/jn
Solids, Total Dissolved TDS @ 180 C	1800	mg/L		5		1	A2540 C	07/31/07 09:21/jn
Solids, Total Suspended TSS @ 105 C	100	mg/L		5		1	A2540 D	07/30/07 13:55/jn
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	08/02/07 01:47/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	08/02/07 01:47/eli-c
<b>METALS - TOTAL</b>								
Arsenic	0.003	mg/L		0.001		1	E200.8	08/01/07 19:43/eli-c
Barium	ND	mg/L		0.1		1	E200.8	08/01/07 19:43/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	07/31/07 18:22/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/01/07 19:43/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	08/01/07 19:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/01/07 19:43/eli-c
Iron	1.34	mg/L		0.03		1	E200.7	07/31/07 18:22/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	08/01/07 19:43/eli-c
Manganese	0.51	mg/L		0.01		1	E200.8	08/01/07 19:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/01/07 19:43/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 3 of 4



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07070382-002  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 09/03/07  
**Collection Date:** 07/24/07 15:30  
**Date Received:** 07/25/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By	
				RL	QCL			
<b>METALS - TOTAL</b>								
Molybdenum	ND	mg/L		0.1		1	E200.8	08/01/07 19:43/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	08/01/07 19:43/eli-c
Selenium	0.002	mg/L		0.001		1	E200.8	08/01/07 19:43/eli-c
Silver	ND	mg/L		0.005		1	E200.8	08/01/07 19:43/eli-c
Uranium	0.0073	mg/L		0.0003		1	E200.8	08/01/07 19:43/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	08/01/07 19:43/eli-c
Zinc	0.01	mg/L		0.01		1	E200.8	08/01/07 19:43/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	11.4	pCi/L		1.0		1	E900.0	08/11/07 09:40/eli-c
Gross Alpha precision (±)	2.1	pCi/L				1	E900.0	08/11/07 09:40/eli-c
Gross Beta	13.9	pCi/L		2.0		1	E900.0	08/11/07 09:40/eli-c
Gross Beta precision (±)	5.1	pCi/L				1	E900.0	08/11/07 09:40/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	08/06/07 15:52/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.79	%				1	A1030 E	08/15/07 14:45/ADM
Anions	26.6	meq/L				1	A1030 E	08/15/07 14:45/ADM
Cations	29.3	meq/L				1	A1030 E	08/15/07 14:45/ADM
Solids, Total Dissolved Calculated	1770	mg/L				1	A1030 E	08/15/07 14:45/ADM
TDS Balance (0.80 - 1.20)	1.03	dec. %				1	A1030 E	08/15/07 14:45/ADM

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07080273-002  
Client Sample ID: DewBurd BVC04

Report Date: 09/11/07  
Collection Date: 08/20/07 16:08  
Date Received: 08/21/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	350	CFU/100ml	D	10		10	A9222 D	08/21/07 16:15/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	106	mg/L		5		1	A2320 B	09/01/07 14:23/jn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	09/01/07 14:23/jn
Bicarbonate as HCO3	129	mg/L		5		1	A2320 B	09/01/07 14:23/jn
Calcium	77.8	mg/L		0.5		1	E200.7	08/30/07 18:20/eli-c
Chloride	118	mg/L		1		10	E300.0	08/24/07 07:14/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	08/22/07 00:25/jmh
Magnesium	24.8	mg/L		0.5		1	E200.7	08/30/07 18:20/eli-c
Nitrogen, Nitrate as N	0.4	mg/L		0.1		1	E300.0	08/22/07 00:25/jmh
Potassium	10.1	mg/L		0.5		1	E200.7	08/30/07 18:20/eli-c
Silica	15.5	mg/L		0.5		1	E200.7	08/30/07 18:20/eli-c
Sodium	194	mg/L		0.5		1	E200.7	08/30/07 18:20/eli-c
Sulfate	436	mg/L	D	7		10	E300.0	08/24/07 07:14/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1400	umhos/cm		5		1	A2510 B	08/24/07 10:17/jmh
pH	8.48	s.u.		0.01		1	A4500-H B	08/24/07 09:59/jmh
Solids, Suspended Sediment SSC @ 105 C	156	mg/L		5		1	D3977	08/30/07 09:36/jn
Solids, Total Dissolved TDS @ 180 C	910	mg/L		5		1	A2540 C	08/25/07 16:54/jmh
Solids, Total Suspended TSS @ 105 C	160	mg/L		5		1	A2540 D	08/24/07 12:18/jn
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		10	E200.8	09/02/07 00:06/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	09/02/07 00:06/eli-c
<b>METALS - TOTAL</b>								
Arsenic	0.003	mg/L		0.001		1	E200.8	09/02/07 01:40/eli-c
Barium	ND	mg/L		0.1		1	E200.8	09/02/07 01:40/eli-c
Boron	ND	mg/L		0.1		1	E200.7	08/30/07 18:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	09/02/07 01:40/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	09/02/07 01:40/eli-c
Copper	ND	mg/L		0.01		1	E200.8	09/02/07 01:40/eli-c
Iron	2.48	mg/L		0.03		1	E200.7	08/30/07 18:20/eli-c
Lead	0.003	mg/L		0.001		1	E200.8	09/02/07 01:40/eli-c
Manganese	0.41	mg/L		0.01		1	E200.8	09/02/07 01:40/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	09/02/07 01:40/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 3 of 4



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07080273-002  
Client Sample ID: DewBurd BVC04

Report Date: 09/11/07  
Collection Date: 08/20/07 16:08  
Date Received: 08/21/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - TOTAL</b>									
Molybdenum	ND	mg/L		0.1			1	E200.8	09/02/07 01:40/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	09/02/07 01:40/eli-c
Selenium	0.002	mg/L		0.001			1	E200.8	09/02/07 01:40/eli-c
Silver	ND	mg/L		0.005			1	E200.8	09/02/07 01:40/eli-c
Uranium	0.0030	mg/L		0.0003			1	E200.8	09/02/07 01:40/eli-c
Vanadium	ND	mg/L		0.1			1	E200.8	09/02/07 01:40/eli-c
Zinc	0.01	mg/L		0.01			1	E200.8	09/02/07 01:40/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	7.0	pCi/L		1.0			1	E900.0	09/02/07 23:51/eli-c
Gross Alpha precision (±)	1.3	pCi/L					1	E900.0	09/02/07 23:51/eli-c
Gross Beta	15.4	pCi/L		2.0			1	E900.0	09/02/07 23:51/eli-c
Gross Beta precision (±)	2.8	pCi/L					1	E900.0	09/02/07 23:51/eli-c
Radium 226	0.7	pCi/L		0.2			1	E903.0	09/04/07 14:06/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	09/04/07 14:06/eli-c
<b>DATA QUALITY</b>									
A/C Balance (± 5)	0.739	%					1	A1030 E	09/10/07 14:03/ADM
Anions	14.6	meq/L					1	A1030 E	09/10/07 14:03/ADM
Cations	14.8	meq/L					1	A1030 E	09/10/07 14:03/ADM
Solids, Total Dissolved Calculated	945	mg/L					1	A1030 E	09/10/07 14:03/ADM
TDS Balance (0.80 - 1.20)	0.970	dec. %					1	A1030 E	09/10/07 14:03/ADM

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100001-001  
Client Sample ID: DewBurd BVC04

Report Date: 12/26/07  
Collection Date: 09/28/07 08:16  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	12	CFU/100ml	D	2		2	A9222 D	09/29/07 08:15/lkl
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	110	mg/L		5		1	A2320 B	10/04/07 17:57/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:57/sn
Bicarbonate as HCO3	134	mg/L		5		1	A2320 B	10/04/07 17:57/sn
Calcium	288	mg/L		1		1	E200.7	10/08/07 20:51/eli-c
Chloride	1310	mg/L	D	4		100	E300.0	10/05/07 00:23/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	10/01/07 21:46/jmh
Magnesium	171	mg/L		1		1	E200.7	10/08/07 20:51/eli-c
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/01/07 21:46/jmh
Potassium	10	mg/L		1		1	E200.7	10/08/07 20:51/eli-c
Silica	1	mg/L		1		1	E200.7	10/08/07 20:51/eli-c
Sodium	1100	mg/L	D	8		10	E200.7	10/08/07 17:57/eli-c
Sulfate	2520	mg/L	D	70		100	E300.0	10/05/07 00:23/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	7030	umhos/cm		5		1	A2510 B	10/02/07 18:58/jmh
pH	8.23	s.u.		0.01		1	A4500-H B	10/02/07 18:58/jmh
Solids, Suspended Sediment SSC @ 105 C	86	mg/L		5		1	D3977	10/05/07 08:44/jmh
Solids, Total Dissolved TDS @ 180 C	5600	mg/L		5		1	A2540 C	10/02/07 13:09/sn
Solids, Total Suspended TSS @ 105 C	47	mg/L		5		1	A2540 D	10/04/07 08:34/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/04/07 20:39/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/04/07 20:39/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/04/07 20:39/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	10/08/07 20:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/04/07 20:39/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/04/07 20:39/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/04/07 20:39/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/08/07 20:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/04/07 20:39/eli-c
Manganese	0.02	mg/L		0.01		1	E200.8	10/04/07 20:39/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 20:39/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/04/07 20:39/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	10/04/07 20:39/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 1 of 3

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
 Project: Edgemont  
 Lab ID: R07100001-001  
 Client Sample ID: DewBurd BVC04

Report Date: 12/26/07  
 Collection Date: 09/28/07 08:16  
 Date Received: 09/29/07  
 Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Selenium	0.003	mg/L		0.001		1	E200.8	10/04/07 20:39/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/04/07 20:39/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/04/07 20:39/eli-c
Uranium	0.0140	mg/L		0.0003		1	E200.8	10/04/07 20:39/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/04/07 20:39/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	10/04/07 20:39/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		10	E200.8	10/09/07 02:39/eli-c
Uranium	ND	mg/L		0.0003		10	E200.8	10/09/07 02:39/eli-c
<b>METALS - TOTAL</b>								
Aluminum	2.0	mg/L		0.1		1	E200.8	10/08/07 22:46/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	10/08/07 22:46/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/08/07 22:46/eli-c
Boron	0.40	mg/L		0.10		2	E200.7	10/09/07 21:34/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/08/07 22:46/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	10/08/07 22:46/eli-c
Chromium, Hexavalent	ND	mg/L	H	0.005		1	A3500-Cr B	10/03/07 08:30/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/10/07 16:40/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/08/07 22:46/eli-c
Iron	1.34	mg/L		0.03		1	E200.7	10/08/07 20:58/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	10/08/07 22:46/eli-c
Manganese	0.10	mg/L		0.01		1	E200.8	10/08/07 22:46/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/08/07 22:46/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/08/07 22:46/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	10/08/07 22:46/eli-c
Silver	ND	mg/L		0.005		1	E200.8	10/08/07 22:46/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	10/08/07 22:46/eli-c
Uranium	0.0137	mg/L		0.0003		1	E200.8	10/08/07 22:46/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	10/08/07 22:46/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	10/09/07 21:34/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	10/11/07 17:04/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/10/07 10:34/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	10/12/07 09:25/eli-c

Report RL - Analyte reporting limit. MCL - Maximum contaminant level. Page 2 of 3  
 Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.  
 H - Analysis performed past recommended holding time.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100001-001  
Client Sample ID: DewBurd BVC04

Report Date: 12/26/07  
Collection Date: 09/28/07 08:16  
Date Received: 09/29/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/25/07 11:25/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/29/07 13:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Thorium 230	1.7	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	1.5	pCi/L				1	E907.0	10/29/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		2.0		1	E909.0M	10/24/07 07:00/eli-c
Polonium 210	ND	pCi/L		2.0		1	RMO-3008	10/25/07 16:00/eli-c
Radium 226	ND	pCi/L		0.9		1	E903.0	10/30/07 13:34/eli-c
Thorium 230	ND	pCi/L		2.0		1	E907.0	10/26/07 10:00/eli-c
- Suspended RLs raised due to low sample volume.								
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	2.3	pCi/L		1.0		1	E900.0	10/12/07 01:09/eli-c
Gross Alpha precision (±)	4.9	pCi/L				1	E900.0	10/12/07 01:09/eli-c
Gross Beta	ND	pCi/L		2.0		1	E900.0	10/12/07 01:09/eli-c
Radium 226	0.7	pCi/L		0.2		1	E903.0	10/15/07 12:20/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	10/15/07 12:20/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	10/04/07 15:30/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-3.55	%				1	A1030 E	12/10/07 18:22/eli-c
Anions	91.7	meq/L				1	A1030 E	12/10/07 18:22/eli-c
Cations	85.4	meq/L				1	A1030 E	12/10/07 18:22/eli-c
Solids, Total Dissolved Calculated	5640	mg/L				1	A1030 E	12/10/07 18:22/eli-c
TDS Balance (0.80 - 1.20)	0.990	dec. %				1	A1030 E	12/10/07 18:22/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100295-001  
Client Sample ID: DewBurdBVC04

Report Date: 12/26/07  
Collection Date: 10/17/07 12:15  
Date Received: 10/18/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	62	CFU/100ml	D	2		2	A9222 D	10/18/07 10:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	166	mg/L		5		1	A2320 B	10/29/07 14:30/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/29/07 14:30/sn
Bicarbonate as HCO3	202	mg/L		5		1	A2320 B	10/29/07 14:30/sn
Calcium	382	mg/L		1		10	E200.7	11/02/07 16:19/eli-c
Chloride	1540	mg/L	D	4		100	E300.0	10/24/07 15:25/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	10/19/07 23:54/jmh
Magnesium	210	mg/L		1		10	E200.7	11/02/07 16:19/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	10/25/07 16:58/sn
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	10/19/07 23:54/jmh
Potassium	9	mg/L		1		1	E200.7	11/02/07 17:01/eli-c
Silica	2	mg/L		1		1	E200.7	11/02/07 17:01/eli-c
Sodium	1160	mg/L	D	8		10	E200.7	11/02/07 16:19/eli-c
Sulfate	2670	mg/L	D	70		100	E300.0	10/24/07 15:25/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	7130	umhos/cm		5		1	A2510 B	10/31/07 16:15/jmh
pH	7.94	s.u.		0.01		1	A4500-H B	10/24/07 12:29/jmh
Sodium Adsorption Ratio (SAR)	12	unitless		0.10		1	Calculation	11/05/07 10:15/eli-c
Solids, Suspended Sediment SSC @ 105 C	5820	mg/L		5		1	D3977	10/26/07 16:12/sn
Solids, Total Dissolved TDS @ 180 C	5800	mg/L		5		1	A2540 C	10/19/07 14:07/jmh
Solids, Total Suspended TSS @ 105 C	16	mg/L		5		1	A2540 D	10/24/07 14:45/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/24/07 03:53/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	10/24/07 03:53/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/24/07 03:53/eli-c
Boron	0.6	mg/L		0.1		1	E200.7	11/02/07 17:01/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/24/07 03:53/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/24/07 03:53/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/24/07 03:53/eli-c
Iron	ND	mg/L		0.03		1	E200.7	11/02/07 17:01/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/24/07 03:53/eli-c
Manganese	0.16	mg/L		0.01		1	E200.8	10/24/07 03:53/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/24/07 03:53/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/24/07 03:53/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 1 of 12

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100295-001  
Client Sample ID: DewBurdBVC04

Report Date: 12/26/07  
Collection Date: 10/17/07 12:15  
Date Received: 10/18/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED</b>							
Nickel	ND	mg/L		0.01		1	E200.8 10/24/07 03:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8 10/24/07 03:53/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 10/24/07 03:53/eli-c
Uranium	0.0230	mg/L		0.0003		1	E200.8 10/24/07 03:53/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8 10/24/07 03:53/eli-c
Zinc	ND	mg/L		0.01		1	E200.8 10/24/07 03:53/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001		1	E200.8 10/29/07 18:26/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8 10/29/07 18:26/eli-c
<b>METALS - TOTAL</b>							
Aluminum	0.6	mg/L		0.1		1	E200.8 10/24/07 14:12/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8 10/24/07 14:12/eli-c
Barium	ND	mg/L		0.1		1	E200.8 10/24/07 14:12/eli-c
Boron	0.6	mg/L		0.1		1	E200.7 11/02/07 17:14/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8 10/24/07 14:12/eli-c
Chromium	ND	mg/L		0.05		1	E200.8 10/24/07 14:12/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B 10/18/07 09:30/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation 12/16/07 15:26/eli-c
Copper	ND	mg/L		0.01		1	E200.8 10/24/07 14:12/eli-c
Iron	0.39	mg/L		0.03		1	E200.7 11/02/07 17:14/eli-c
Lead	ND	mg/L		0.001		1	E200.8 10/24/07 14:12/eli-c
Manganese	0.18	mg/L		0.01		1	E200.8 10/24/07 14:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8 10/24/07 14:12/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8 10/24/07 14:12/eli-c
Nickel	ND	mg/L		0.05		1	E200.8 10/24/07 14:12/eli-c
Silver	ND	mg/L		0.005		1	E200.8 10/24/07 14:12/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 10/24/07 14:12/eli-c
Uranium	0.0239	mg/L		0.0003		1	E200.8 10/24/07 14:12/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8 10/24/07 14:12/eli-c
Zinc	ND	mg/L		0.01		1	E200.8 10/24/07 14:12/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1	A3114 B 11/02/07 11:45/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 10/31/07 10:17/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 10/31/07 10:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07100295-001  
Client Sample ID: DewBurdBVC04

Report Date: 12/26/07  
Collection Date: 10/17/07 12:15  
Date Received: 10/18/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1	A3114 B 11/02/07 11:53/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 10/31/07 10:25/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 10/31/07 10:30/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Lead 210	ND	pCi/L		1.0		1	E909.0M 11/01/07 08:25/eli-c
Polonium 210	3.0	pCi/L		1.0		1	RMO-3008 11/16/07 13:00/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008 11/16/07 13:00/eli-c
Radium 226	0.5	pCi/L		0.2		1	E903.0 11/05/07 08:58/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0 11/05/07 08:58/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0 11/02/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Lead 210	ND	pCi/L		1.0		1	E909.0M 11/09/07 09:45/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008 11/06/07 13:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0 11/07/07 16:49/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0 10/31/07 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	26.6	pCi/L		1.0		1	E900.0 11/09/07 13:02/eli-c
Gross Alpha precision (±)	5.4	pCi/L				1	E900.0 11/09/07 13:02/eli-c
Gross Beta	14.0	pCi/L		2.0		1	E900.0 11/09/07 13:02/eli-c
Gross Beta precision (±)	14.1	pCi/L				1	E900.0 11/09/07 13:02/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1 10/23/07 19:30/eli-c
<b>DATA QUALITY</b>							
A/C Balance (± 5)	-4.07	%				1	A1030 E 12/16/07 15:29/eli-c
Anions	94.5	meq/L				1	A1030 E 12/16/07 15:29/eli-c
Cations	87.1	meq/L				1	A1030 E 12/16/07 15:29/eli-c
Solids, Total Dissolved Calculated	5700	mg/L				1	A1030 E 12/16/07 15:29/eli-c
TDS Balance (0.80 - 1.20)	1.01	dec. %				1	A1030 E 12/16/07 15:29/eli-c

- Ion Balance achieved using Sulfate from E200.7.

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 3 of 12



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-003  
Client Sample ID: DewBurdBVC04

Report Date: 01/29/08  
Collection Date: 11/19/07 12:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	11/20/07 09:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	176	mg/L		5		1	A2320 B	12/03/07 15:50/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/03/07 15:50/sn
Bicarbonate as HCO3	215	mg/L		5		1	A2320 B	12/03/07 15:50/sn
Calcium	426	mg/L	D	1		10	E200.7	12/03/07 16:59/eli-c
Chloride	1040	mg/L	D	4		100	E300.0	11/21/07 20:04/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	11/20/07 22:33/jmh
Magnesium	140	mg/L		0.5		1	E200.7	12/04/07 16:56/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/29/07 16:40/sn
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	11/20/07 22:33/jmh
Potassium	7	mg/L		1		1	E200.7	12/04/07 16:56/eli-c
Silica	9.1	mg/L		0.5		1	E200.7	12/04/07 16:56/eli-c
Sodium	736	mg/L	D	8		10	E200.7	12/03/07 16:59/eli-c
Sulfate	1920	mg/L	D	10		20	E300.0	11/20/07 22:17/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	5460	umhos/cm		5.0		1	A2510 B	11/26/07 15:33/jmh
pH	7.97	s.u.		0.01		1	A4500-H B	11/26/07 15:08/jmh
Sodium Adsorption Ratio (SAR)	7.9	meq/L		0.10		1	Calculation	12/24/07 14:51/sec
Solids, Suspended Sediment SSC @ 105 C	14	mg/L		5		1	D3977	11/27/07 15:15/jmh
Solids, Total Dissolved TDS @ 180 C	4500	mg/L		5		1	A2540 C	11/26/07 15:47/jmh
Solids, Total Suspended TSS @ 105 C	16	mg/L		5		1	A2540 D	11/19/07 19:01/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		10	E200.8	11/27/07 00:15/eli-c
Arsenic	0.001	mg/L		0.001		10	E200.8	11/27/07 00:15/eli-c
Barium	ND	mg/L		0.1		10	E200.8	11/27/07 00:15/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	12/04/07 16:56/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	11/27/07 00:15/eli-c
Chromium	ND	mg/L		0.01		10	E200.8	11/27/07 00:15/eli-c
Copper	ND	mg/L		0.01		10	E200.8	11/27/07 00:15/eli-c
Iron	ND	mg/L		0.03		1	E200.7	12/04/07 16:56/eli-c
Lead	ND	mg/L		0.001		10	E200.8	11/27/07 00:15/eli-c
Manganese	0.10	mg/L		0.01		10	E200.8	11/27/07 00:15/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/27/07 00:15/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	11/27/07 00:15/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-003  
Client Sample ID: DewBurdBVC04

Report Date: 01/29/08  
Collection Date: 11/19/07 12:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		10	E200.8	11/27/07 00:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/28/07 00:36/eli-c
Thorium 232	ND	mg/L		0.005		10	E200.8	11/27/07 00:15/eli-c
Uranium	0.0189	mg/L		0.0003		10	E200.8	11/27/07 00:15/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	11/27/07 00:15/eli-c
Zinc	ND	mg/L		0.01		10	E200.8	11/27/07 00:15/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	12/03/07 13:39/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	12/03/07 13:39/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.2	mg/L		0.1		5	E200.8	11/30/07 00:14/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	11/27/07 23:14/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/27/07 23:14/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	12/04/07 17:09/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/27/07 23:14/eli-c
Chromium	ND	mg/L		0.05		5	E200.8	11/29/07 04:40/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	11/20/07 17:48/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/24/07 14:52/sec
Copper	ND	mg/L		0.01		5	E200.8	11/29/07 04:40/eli-c
Iron	0.31	mg/L		0.03		1	E200.7	12/04/07 17:09/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/26/07 16:43/eli-c
Manganese	0.10	mg/L		0.01		5	E200.8	11/29/07 04:40/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/27/07 23:14/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/27/07 23:14/eli-c
Nickel	ND	mg/L		0.05		5	E200.8	11/29/07 04:40/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/27/07 23:14/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/26/07 16:43/eli-c
Uranium	0.0177	mg/L		0.0003		1	E200.8	11/26/07 16:43/eli-c
Vanadium	ND	mg/L		0.1		5	E200.8	11/29/07 04:40/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/27/07 23:14/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.004	mg/L		0.001		1	A3114 B	12/03/07 15:04/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/03/07 09:44/eli-c
Selenium-VI	0.004	mg/L		0.001		1	A3114 B	12/04/07 00:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 10 of 16





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-003  
Client Sample ID: DewBurdBVC04

Report Date: 01/29/08  
Collection Date: 11/19/07 12:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	0.004	mg/L		0.001		1 A3114 B	12/03/07 15:25/eli-c
Selenium-IV	ND	mg/L		0.001		1 A3114 B	12/03/07 10:06/eli-c
Selenium-VI	0.004	mg/L		0.001		1 A3114 B	12/04/07 00:00/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Lead 210	ND	pCi/L		1.0		1 E909.0M	11/27/07 08:00/eli-c
Polonium 210	1.3	pCi/L		1.0		1 RMO-3008	11/28/07 12:30/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1 RMO-3008	11/28/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1 E903.0	12/04/07 15:46/eli-c
Thorium 230	ND	pCi/L		0.2		1 E907.0	11/29/07 14:30/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Lead 210	ND	pCi/L		1.0		1 E909.0M	12/04/07 11:15/eli-c
Polonium 210	1.7	pCi/L		1.0		1 RMO-3008	12/05/07 12:00/eli-c
Polonium 210 precision (±)	1.2	pCi/L				1 RMO-3008	12/05/07 12:00/eli-c
Radium 226	0.8	pCi/L		0.2		1 E903.0	12/11/07 09:36/eli-c
Radium 226 precision (±)	0.4	pCi/L				1 E903.0	12/11/07 09:36/eli-c
Thorium 230	ND	pCi/L		0.2		1 E907.0	12/05/07 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	34.7	pCi/L		1.0		1 E900.0	12/06/07 20:59/eli-c
Gross Alpha precision (±)	11.0	pCi/L				1 E900.0	12/06/07 20:59/eli-c
Gross Beta	48.1	pCi/L		2.0		1 E900.0	12/06/07 20:59/eli-c
Gross Beta precision (±)	27.4	pCi/L				1 E900.0	12/06/07 20:59/eli-c
Gross Gamma	1080	pCi/L		20.0		1 E901.1	11/28/07 11:35/eli-c
Gross Gamma precision (±)	172	pCi/L				1 E901.1	11/28/07 11:35/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>							
Lead 210	ND	pCi/L		1.0		1 E909.0M	12/24/07 11:00/eli-c
Polonium 210	3.0	pCi/L		1.0		1 RMO-3008	12/24/07 11:00/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1 RMO-3008	12/24/07 11:00/eli-c
Radium 226	0.8	pCi/L		0.2		1 E903.0	12/24/07 11:00/eli-c
Radium 226 precision (±)	0.4	pCi/L				1 E903.0	12/24/07 11:00/eli-c
Thorium 230	ND	pCi/L		0.2		1 E907.0	12/24/07 11:00/eli-c
<b>DATA QUALITY</b>							
A/C Balance (± 5)	-1.84	%				1 A1030 E	12/24/07 14:56/sec
Anions	67.4	meq/L				1 A1030 E	12/24/07 14:56/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 11 of 16





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110229-003  
Client Sample ID: DewBurdBVC04

Report Date: 01/29/08  
Collection Date: 11/19/07 12:30  
Date Received: 11/19/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>DATA QUALITY</b>								
Cations	65.0	meq/L					1	A1030 E 12/24/07 14:56/sec
Solids, Total Dissolved Calculated	4110	mg/L					1	A1030 E 12/24/07 14:56/sec
TDS Balance (0.80 - 1.20)	1.09	dec. %					1	A1030 E 12/24/07 14:56/sec
- Ion Balance achieved using Sulfate from E200.7.								

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-001  
**Client Sample ID:** DewBurdBVC04

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 10:00  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	10	CFU/100ml	D	2		2	A9222 D	12/12/07 09:45/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	190	mg/L		5		1	A2320 B	12/18/07 18:45/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	12/18/07 18:45/sn
Bicarbonate as HCO3	232	mg/L		5		1	A2320 B	12/18/07 18:45/sn
Calcium	449	mg/L	D	1		10	E200.7	12/27/07 13:20/eli-c
Chloride	601	mg/L	D	2		50	E300.0	12/14/07 02:33/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	12/13/07 19:06/jmh
Magnesium	101	mg/L		0.5		10	E200.7	12/27/07 13:20/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	12/19/07 14:23/sn
Nitrogen, Nitrate as N	0.3	mg/L		0.1		1	E300.0	12/13/07 19:06/jmh
Potassium	5	mg/L		1		2	E200.7	12/27/07 15:37/eli-c
Silica	11.9	mg/L		0.5		10	E200.7	12/27/07 13:20/eli-c
Sodium	415	mg/L	D	8		10	E200.7	12/27/07 13:20/eli-c
Sulfate	1450	mg/L	D	40		50	E300.0	12/14/07 02:33/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	4370	umhos/cm		5.0		1	A2510 B	12/15/07 18:37/jmh
pH	7.88	s.u.		0.01		1	A4500-H B	12/15/07 19:04/jmh
Sodium Adsorption Ratio (SAR)	4.6	meq/L		0.10		1	Calculation	01/23/08 16:29/sec
Solids, Suspended Sediment SSC @ 105 C	11	mg/L		5		1	D3977	12/17/07 17:37/jmh
Solids, Total Dissolved TDS @ 180 C	3500	mg/L		5		1	A2540 C	12/13/07 15:05/jmh
Solids, Total Suspended TSS @ 105 C	10	mg/L		5		1	A2540 D	12/12/07 17:14/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	12/18/07 05:20/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	12/18/07 05:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	12/18/07 05:20/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	12/27/07 15:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	12/18/07 05:20/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	12/18/07 05:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	12/18/07 05:20/eli-c
Iron	ND	mg/L		0.03		2	E200.7	12/27/07 15:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/18/07 05:20/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	12/18/07 05:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/26/07 15:06/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	12/18/07 05:20/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-001  
**Client Sample ID:** DewBurdBVC04

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 10:00  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By	
				RL	QCL			
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	12/18/07 05:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	12/18/07 05:20/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	12/18/07 05:20/eli-c
Uranium	0.0114	mg/L		0.0003		1	E200.8	12/18/07 05:20/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	12/18/07 05:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	12/18/07 05:20/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	12/23/07 10:56/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	12/23/07 10:56/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.1	mg/L		0.1		1	E200.8	12/20/07 00:55/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	12/20/07 00:55/eli-c
Barium	ND	mg/L		0.1		1	E200.8	12/20/07 00:55/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	12/27/07 15:53/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	12/20/07 00:55/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	12/20/07 00:55/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	12/12/07 17:56/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	01/23/08 16:35/sec
Copper	ND	mg/L		0.01		1	E200.8	12/20/07 00:55/eli-c
Iron	0.19	mg/L		0.03		2	E200.7	12/27/07 15:53/eli-c
Lead	ND	mg/L		0.001		1	E200.8	12/20/07 00:55/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	12/20/07 00:55/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	12/21/07 19:11/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	12/20/07 00:55/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	12/20/07 00:55/eli-c
Silver	ND	mg/L		0.005		1	E200.8	12/21/07 19:11/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	12/20/07 00:55/eli-c
Uranium	0.0135	mg/L		0.0003		1	E200.8	12/20/07 00:55/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	12/20/07 00:55/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	12/20/07 00:55/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	12/30/07 10:34/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/29/07 09:42/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	12/30/07 11:58/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-001  
**Client Sample ID:** DewBurdBVC04

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 10:00  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	12/30/07 11:10/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	12/29/07 10:30/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	12/30/07 11:58/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	26	pCi/L		1.0		1	E909.0M	12/21/07 06:15/eli-c
Lead 210 precision (±)	2.6	pCi/L				1	E909.0M	12/21/07 06:15/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	12/20/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/27/07 20:45/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/27/07 15:15/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	8.6	pCi/L		1.0		1	E909.0M	12/26/07 10:30/eli-c
Lead 210 precision (±)	1.3	pCi/L				1	E909.0M	12/26/07 10:30/eli-c
Polonium 210	2.9	pCi/L		1.0		1	RMO-3008	01/02/08 16:00/eli-c
Polonium 210 precision (±)	1.6	pCi/L				1	RMO-3008	01/02/08 16:00/eli-c
Radium 226	0.3	pCi/L		0.2		1	E903.0	12/31/07 11:00/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	12/31/07 11:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/27/07 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	17.1	pCi/L		1.0		1	E900.0	01/02/08 20:21/eli-c
Gross Alpha precision (±)	2.4	pCi/L				1	E900.0	01/02/08 20:21/eli-c
Gross Beta	11.7	pCi/L		2.0		1	E900.0	01/26/08 01:17/eli-c
Gross Beta precision (±)	6.9	pCi/L				1	E900.0	01/26/08 01:17/eli-c
Gross Gamma	1100	pCi/L		20.0		1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	182	pCi/L				1	E901.1	12/05/07 10:50/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Lead 210	35	pCi/L		1.0		1	E909.0M	01/05/08 14:23/sec
Lead 210 precision (±)	2.9	pCi/L				1	E909.0M	01/05/08 14:23/sec
Polonium 210	2.9	pCi/L		1.0		1	RMO-3008	01/07/08 15:00/sec
Polonium 210 precision (±)	1.6	pCi/L				1	RMO-3008	01/07/08 15:00/sec
Radium 226	0.3	pCi/L		0.2		1	E903.0	01/05/08 14:23/sec
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	01/05/08 14:23/sec
Thorium 230	ND	pCi/L		0.2		1	E907.0	01/11/08 16:40/sec

**DATA QUALITY**

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07120148-001  
**Client Sample ID:** DewBurdBVC04

**Report Date:** 02/04/08  
**Collection Date:** 12/11/07 10:00  
**Date Received:** 12/12/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
<b>DATA QUALITY</b>								
A/C Balance (± 5)	ND	%				1	A1030 E	01/23/08 16:26/sec
Anions	51.0	meq/L				1	A1030 E	01/23/08 16:26/sec
Cations	48.8	meq/L				1	A1030 E	01/23/08 16:26/sec
Solids, Total Dissolved Calculated	3140	mg/L				1	A1030 E	01/23/08 16:26/sec
TDS Balance (0.80 - 1.20)	1.11	dec. %				1	A1030 E	01/23/08 16:26/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08010124-003  
Client Sample ID: DewBurdBVC04

Report Date: 02/29/08  
Collection Date: 01/11/08 13:00  
Date Received: 01/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	4	CFU/100ml	D	2		2	A9222 D	01/11/08 18:15/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	220	mg/L		5		1	A2320 B	01/21/08 16:06/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	01/21/08 16:06/sn
Bicarbonate as HCO3	268	mg/L		5		1	A2320 B	01/21/08 16:06/sn
Calcium	463	mg/L	D	1		10	E200.7	01/24/08 15:28/eli-c
Chloride	255	mg/L	D	2		50	E300.0	01/12/08 23:23/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	01/12/08 23:38/jmh
Magnesium	124	mg/L		0.5		1	E200.7	01/24/08 16:26/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	01/14/08 16:12/sn
Nitrogen, Nitrate as N	0.4	mg/L		0.1		1	E300.0	01/12/08 23:38/jmh
Potassium	5	mg/L		1		1	E200.7	01/24/08 16:26/eli-c
Silica	14.1	mg/L		0.5		1	E200.7	01/24/08 16:26/eli-c
Sodium	224	mg/L	D	8		10	E200.7	01/24/08 15:28/eli-c
Sulfate	1450	mg/L	D	40		50	E300.0	01/12/08 23:23/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3310	umhos/cm		5.0		1	A2510 B	01/17/08 16:56/jmh
pH	7.80	s.u.		0.01		1	A4500-H B	01/17/08 17:06/jmh
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.10		1	Calculation	02/05/08 13:40/sec
Solids, Suspended Sediment SSC @ 105 C	24	mg/L		5		1	D3977	01/17/08 14:46/jmh
Solids, Total Dissolved TDS @ 180 C	3000	mg/L		5		1	A2540 C	01/16/08 10:06/sn
Solids, Total Suspended TSS @ 105 C	25	mg/L		5		1	A2540 D	01/16/08 10:51/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	01/20/08 23:21/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	01/17/08 18:21/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/17/08 18:21/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	01/24/08 16:26/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/17/08 18:21/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	01/20/08 23:21/eli-c
Copper	ND	mg/L		0.01		1	E200.8	01/17/08 18:21/eli-c
Iron	ND	mg/L		0.03		1	E200.7	01/24/08 16:26/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/17/08 18:21/eli-c
Manganese	0.05	mg/L		0.01		1	E200.8	01/20/08 23:21/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	01/17/08 18:21/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	01/17/08 18:21/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 9 of 12



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08010124-003  
Client Sample ID: DewBurdBVC04

Report Date: 02/29/08  
Collection Date: 01/11/08 13:00  
Date Received: 01/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	01/17/08 18:21/eli-c
Silver	ND	mg/L		0.005		1	E200.8	01/17/08 18:21/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/17/08 18:21/eli-c
Uranium	0.0141	mg/L		0.0003		1	E200.8	01/17/08 18:21/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	01/17/08 18:21/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/17/08 18:21/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	01/20/08 21:46/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	01/20/08 21:46/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.6	mg/L		0.1		1	E200.8	01/20/08 17:01/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	01/20/08 17:01/eli-c
Barium	ND	mg/L		0.1		1	E200.8	01/20/08 17:01/eli-c
Boron	0.2	mg/L		0.1		1	E200.7	01/24/08 16:55/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	01/20/08 17:01/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	01/20/08 17:01/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	01/12/08 10:45/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	02/05/08 13:49/sec
Copper	ND	mg/L		0.01		1	E200.8	01/20/08 17:01/eli-c
Iron	0.68	mg/L		0.03		1	E200.7	01/24/08 16:55/eli-c
Lead	ND	mg/L		0.001		1	E200.8	01/20/08 17:01/eli-c
Manganese	0.12	mg/L		0.01		1	E200.8	01/20/08 17:01/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	01/20/08 17:01/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	01/20/08 17:01/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	01/20/08 17:01/eli-c
Silver	ND	mg/L		0.005		1	E200.8	01/20/08 17:01/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	01/20/08 17:01/eli-c
Uranium	0.0144	mg/L		0.0003		1	E200.8	01/20/08 17:01/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	01/20/08 17:01/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	01/20/08 17:01/eli-c
Calcium	508	mg/L	D	0.8		10	E200.7	01/24/08 16:16/eli-c
Magnesium	125	mg/L		0.5		1	E200.7	01/24/08 16:55/eli-c
Potassium	5.4	mg/L		0.5		1	E200.7	01/24/08 16:55/eli-c
Silica	16.6	mg/L		0.1		1	E200.7	01/24/08 16:55/eli-c
Sodium	259	mg/L		0.5		1	E200.7	01/24/08 16:55/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08010124-003  
Client Sample ID: DewBurdBVC04

Report Date: 02/29/08  
Collection Date: 01/11/08 13:00  
Date Received: 01/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium	0.003	mg/L		0.001			1	A3114 B	01/17/08 12:37/eli-ca
Selenium-IV	ND	mg/L		0.001			1	A3114 B	01/17/08 09:53/eli-ca
Selenium-VI	0.003	mg/L		0.001			1	A3114 B	01/17/08 13:11/eli-ca
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	0.003	mg/L		0.001			1	A3114 B	01/21/08 13:54/eli-ca
Selenium-IV	ND	mg/L		0.001			1	A3114 B	01/21/08 11:17/eli-ca
Selenium-VI	0.003	mg/L		0.001			1	A3114 B	01/21/08 14:21/eli-ca
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	2.2	pCi/L		1.0			1	E909.0M	01/17/08 11:45/eli-c
Lead 210 precision (±)	1.0	pCi/L					1	E909.0M	01/17/08 11:45/eli-c
Polonium 210	1.8	pCi/L		1.0			1	RMO-3008	01/21/08 14:00/eli-c
Polonium 210 precision (±)	1.2	pCi/L					1	RMO-3008	01/21/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	01/29/08 16:57/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	01/17/08 16:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	01/21/08 11:30/eli-c
Polonium 210	ND	pCi/L		1.0			1	RMO-3008	01/21/08 14:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	01/28/08 12:51/eli-c
Thorium 230	ND	pCi/L		0.2			1	E907.0	01/21/08 14:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	13.9	pCi/L		1.0			1	E900.0	01/23/08 09:33/eli-c
Gross Alpha precision (±)	2.6	pCi/L					1	E900.0	01/23/08 09:33/eli-c
Gross Beta	7.2	pCi/L		2.0			1	E900.0	01/23/08 09:33/eli-c
Gross Beta precision (±)	6.9	pCi/L					1	E900.0	01/23/08 09:33/eli-c
Gross Gamma	ND	pCi/L		20.0			1	E901.1	01/17/08 16:36/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	2.2	pCi/L		1.0			1	E909.0M	02/05/08 17:18/sec
Lead 210 precision (±)	1.0	pCi/L					1	E909.0M	02/05/08 17:18/sec
Polonium 210	1.8	pCi/L		1.0			1	RMO-3008	02/05/08 17:18/sec
Polonium 210 precision (±)	1.2	pCi/L					1	RMO-3008	02/05/08 17:18/sec
Radium 226	ND	pCi/L		0.2			1	E903.0	02/05/08 17:18/sec
Thorium 230	ND	pCi/L		0.2			1	E907.0	02/05/08 17:18/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 11 of 12



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08010124-003  
**Client Sample ID:** DewBurdBVC04

**Report Date:** 02/29/08  
**Collection Date:** 01/11/08 13:00  
**Date Received:** 01/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>DATA QUALITY</b>								
A/C Balance (± 5)	1.72	%					1	A1030 E 02/05/08 13:42/sec
Anions	41.7	meq/L					1	A1030 E 02/05/08 13:42/sec
Cations	43.2	meq/L					1	A1030 E 02/05/08 13:42/sec
Solids, Total Dissolved Calculated	2650	mg/L					1	A1030 E 02/05/08 13:42/sec
TDS Balance (0.80 - 1.20)	1.12	dec. %					1	A1030 E 02/05/08 13:42/sec

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-002  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:05  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	32	CFU/100ml	D	4		4	A9222 D	03/10/08 11:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	118	mg/L		5		1	A2320 B	03/17/08 14:58/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/17/08 14:58/sn
Bicarbonate as HCO3	144	mg/L		5		1	A2320 B	03/17/08 14:58/sn
Calcium	225	mg/L		0.5		5	E200.7	04/10/08 20:36/eli-b
Chloride	339	mg/L	D	5		50	E300.0	03/12/08 10:25/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	03/12/08 10:41/jmh
Magnesium	53.3	mg/L		0.5		5	E200.7	04/10/08 20:36/eli-b
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	03/14/08 16:23/jmh
Nitrogen, Nitrate as N	0.5	mg/L		0.1		1	E300.0	03/12/08 10:41/jmh
Potassium	5	mg/L		1		5	E200.7	04/10/08 20:36/eli-b
Sodium	280	mg/L		0.5		5	E200.7	04/10/08 20:36/eli-b
Sulfate	681	mg/L	D	3		50	E300.0	03/12/08 10:25/jmh
Silica	7.4	mg/L		0.2		5	E200.7	04/10/08 20:36/eli-b
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2640	umhos/cm		5.0		1	A2510 B	03/12/08 15:30/jmh
pH	8.09	s.u.		0.01		1	A4500-H B	03/12/08 13:23/jmh
Sodium Adsorption Ratio (SAR)	4.3	Unitless		0.10		1	Calculation	04/10/08 20:36/krs
Solids, Suspended Sediment SSC @ 105 C	323	mg/L		5		1	D3977	03/10/08 12:22/jmh
Solids, Total Dissolved TDS @ 180 C	1800	mg/L		5		1	A2540 C	03/10/08 12:48/jmh
Solids, Total Suspended TSS @ 105 C	270	mg/L		5		1	A2540 D	03/11/08 14:11/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		5	E200.7	04/10/08 20:36/eli-b
Arsenic	ND	mg/L		0.001		1	E200.8	04/04/08 01:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/04/08 01:08/eli-c
Boron	0.2	mg/L		0.1		5	E200.7	04/10/08 20:36/eli-b
Cadmium	ND	mg/L		0.005		1	E200.8	04/04/08 01:08/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	04/04/08 01:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/04/08 01:08/eli-c
Iron	ND	mg/L		0.03		5	E200.7	04/10/08 20:36/eli-b
Lead	ND	mg/L		0.001		1	E200.8	04/04/08 01:08/eli-c
Manganese	0.08	mg/L		0.01		1	E200.8	04/04/08 01:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/04/08 01:08/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	04/04/08 01:08/eli-c

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-002  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:05  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	04/04/08 01:08/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/04/08 01:08/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/04/08 01:08/eli-c
Uranium	0.0056	mg/L		0.0003		1	E200.8	04/04/08 01:08/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/04/08 01:08/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/04/08 01:08/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.004	mg/L		0.001		1	E200.8	03/28/08 18:25/eli-c
Uranium	0.0014	mg/L		0.0003		1	E200.8	03/28/08 18:25/eli-c
<b>METALS - TOTAL</b>								
Aluminum	9.9	mg/L		0.1		2	E200.7	04/12/08 01:53/eli-b
Arsenic	0.004	mg/L		0.001		1	E200.8	04/11/08 20:08/eli-b
Barium	ND	mg/L		0.1		1	E200.8	04/11/08 20:08/eli-b
Boron	0.1	mg/L		0.1		1	E200.8	04/11/08 20:08/eli-b
Cadmium	ND	mg/L		0.005		1	E200.8	04/11/08 20:08/eli-b
Chromium	ND	mg/L		0.05		1	E200.8	04/11/08 20:08/eli-b
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	03/10/08 00:00/jmh
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	05/08/08 10:46/krs
Copper	ND	mg/L		0.01		1	E200.8	04/11/08 20:08/eli-b
Iron	8.65	mg/L		0.03		2	E200.7	04/12/08 01:53/eli-b
Lead	0.007	mg/L		0.001		1	E200.8	04/11/08 20:08/eli-b
Manganese	0.28	mg/L		0.01		1	E200.8	04/11/08 20:08/eli-b
Mercury	ND	mg/L		0.001		1	E200.8	04/11/08 20:08/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/11/08 20:08/eli-b
Nickel	ND	mg/L		0.05		1	E200.8	04/11/08 20:08/eli-b
Silver	ND	mg/L		0.005		1	E200.8	04/11/08 20:08/eli-b
Thorium 232	0.005	mg/L		0.005		1	E200.8	04/11/08 20:08/eli-b
Uranium	0.0061	mg/L		0.0003		1	E200.8	04/11/08 20:08/eli-b
Vanadium	ND	mg/L		0.1		1	E200.8	04/11/08 20:08/eli-b
Zinc	0.06	mg/L		0.01		1	E200.8	04/11/08 20:08/eli-b
Calcium	217	mg/L		0.5		2	E200.7	04/12/08 01:53/eli-b
Magnesium	53.5	mg/L		0.5		2	E200.7	04/12/08 01:53/eli-b
Potassium	6.6	mg/L		0.5		2	E200.7	04/12/08 01:53/eli-b
Sodium	273	mg/L	D	2		2	E200.7	04/12/08 01:53/eli-b
Silica	54.5	mg/L		0.2		2	E200.7	04/12/08 01:53/eli-b

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-002  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:05  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	03/19/08 11:13/eli-c
Selenium-IV	0.001	mg/L		0.001		1	A3114 B	03/19/08 09:16/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/19/08 12:04/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	03/19/08 11:35/eli-c
Selenium-IV	0.001	mg/L		0.001		1	A3114 B	03/19/08 09:40/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	03/19/08 12:04/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226	0.08	pCi/L	U			1	E903.0	03/26/08 11:40/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/26/08 11:40/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	03/26/08 11:40/eli-c
Thorium 230	0.2	pCi/L		0.2		1	E907.0	03/31/08 14:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	03/31/08 14:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	2.5	pCi/L	U			1	E903.0	05/16/08 09:52/eli-c
Radium 226 precision (±)	2.0	pCi/L				1	E903.0	05/16/08 09:52/eli-c
Radium 226 MDC	2.8	pCi/L				1	E903.0	05/16/08 09:52/eli-c
Thorium 230	0.3	pCi/L	U	0.2		1	E907.0	03/26/08 15:15/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	03/26/08 15:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	6.7	pCi/L	U			1	E900.0	04/02/08 20:04/eli-c
Gross Alpha precision (±)	5.4	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Alpha MDC	8.2	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Beta	-2	pCi/L	U			1	E900.0	04/02/08 20:04/eli-c
Gross Beta precision (±)	4.2	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Beta MDC	7.1	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	03/14/08 16:57/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	03/14/08 16:57/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	0.1	pCi/L	U			1	E903.0	04/21/08 13:54/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	04/21/08 13:54/eli-c
Thorium 230	0.5	pCi/L		0.2		1	E907.0	04/20/08 17:48/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	04/20/08 17:48/eli-c

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-002  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:05  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	03/24/08 12:29/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.30	%				1	A1030 E	05/08/08 09:39/krs
Anions	26.1	meq/L				1	A1030 E	05/08/08 09:39/krs
Cations	27.9	meq/L				1	A1030 E	05/08/08 09:39/krs
Solids, Total Dissolved Calculated	1680	mg/L				1	A1030 E	05/08/08 09:39/krs
TDS Balance (0.80 - 1.20)	1.06	dec. %				1	A1030 E	05/08/08 09:39/krs

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-003  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:15  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	36	CFU/100ml	D	4		4	A9222 D	03/10/08 11:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	116	mg/L		5		1	A2320 B	03/17/08 15:00/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/17/08 15:00/sn
Bicarbonate as HCO3	141	mg/L		5		1	A2320 B	03/17/08 15:00/sn
Calcium	220	mg/L		0.5		5	E200.7	04/10/08 20:45/eli-b
Chloride	364	mg/L	D	5		50	E300.0	03/12/08 10:57/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/12/08 11:13/jmh
Magnesium	51.9	mg/L		0.5		5	E200.7	04/10/08 20:45/eli-b
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	03/14/08 16:24/jmh
Nitrogen, Nitrate as N	0.5	mg/L		0.1		1	E300.0	03/12/08 11:13/jmh
Potassium	5	mg/L		1		5	E200.7	04/10/08 20:45/eli-b
Sodium	266	mg/L		0.5		5	E200.7	04/10/08 20:45/eli-b
Sulfate	736	mg/L	D	3		50	E300.0	03/12/08 10:57/jmh
Silica	7.2	mg/L		0.2		5	E200.7	04/10/08 20:45/eli-b
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2510	umhos/cm		5.0		1	A2510 B	03/12/08 15:29/jmh
pH	7.90	s.u.		0.01		1	A4500-H B	03/12/08 13:23/jmh
Sodium Adsorption Ratio (SAR)	4.2	Unitless		0.10		1	Calculation	04/10/08 20:45/krs
Solids, Suspended Sediment SSC @ 105 C	326	mg/L		5		1	D3977	03/10/08 12:22/jmh
Solids, Total Dissolved TDS @ 180 C	1800	mg/L		5		1	A2540 C	03/10/08 12:48/jmh
Solids, Total Suspended TSS @ 105 C	290	mg/L		5		1	A2540 D	03/11/08 14:12/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		5	E200.7	04/10/08 20:45/eli-b
Arsenic	ND	mg/L		0.001		1	E200.8	04/04/08 01:15/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/04/08 01:15/eli-c
Boron	0.1	mg/L		0.1		5	E200.7	04/10/08 20:45/eli-b
Cadmium	ND	mg/L		0.005		1	E200.8	04/04/08 01:15/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	04/04/08 01:15/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/04/08 01:15/eli-c
Iron	ND	mg/L		0.03		5	E200.7	04/10/08 20:45/eli-b
Lead	ND	mg/L		0.001		1	E200.8	04/04/08 01:15/eli-c
Manganese	0.09	mg/L		0.01		1	E200.8	04/04/08 01:15/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/04/08 01:15/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	04/04/08 01:15/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-003  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:15  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By	
				RL	QCL			
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	04/04/08 01:15/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/04/08 01:15/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/04/08 01:15/eli-c
Uranium	0.0055	mg/L		0.0003		1	E200.8	04/04/08 01:15/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/04/08 01:15/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/04/08 01:15/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.004	mg/L		0.001		1	E200.8	03/28/08 18:31/eli-c
Uranium	0.0011	mg/L		0.0003		1	E200.8	03/28/08 18:31/eli-c
<b>METALS - TOTAL</b>								
Aluminum	8.3	mg/L		0.1		2	E200.7	04/12/08 01:57/eli-b
Arsenic	0.004	mg/L		0.001		1	E200.8	04/11/08 20:22/eli-b
Barium	ND	mg/L		0.1		1	E200.8	04/11/08 20:22/eli-b
Boron	0.1	mg/L		0.1		1	E200.8	04/11/08 20:22/eli-b
Cadmium	ND	mg/L		0.005		1	E200.8	04/11/08 20:22/eli-b
Chromium	ND	mg/L		0.05		1	E200.8	04/11/08 20:22/eli-b
Chromium, Hexavalent	0.008	mg/L		0.005		1	A3500-Cr B	03/10/08 00:00/jmh
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	05/08/08 10:46/krs
Copper	ND	mg/L		0.01		1	E200.8	04/11/08 20:22/eli-b
Iron	8.28	mg/L		0.03		2	E200.7	04/12/08 01:57/eli-b
Lead	0.008	mg/L		0.001		1	E200.8	04/11/08 20:22/eli-b
Manganese	0.29	mg/L		0.01		1	E200.8	04/11/08 20:22/eli-b
Mercury	ND	mg/L		0.001		1	E200.8	04/11/08 20:22/eli-b
Molybdenum	ND	mg/L		0.1		1	E200.8	04/11/08 20:22/eli-b
Nickel	ND	mg/L		0.05		1	E200.8	04/11/08 20:22/eli-b
Silver	ND	mg/L		0.005		1	E200.8	04/11/08 20:22/eli-b
Thorium 232	ND	mg/L		0.005		1	E200.8	04/11/08 20:22/eli-b
Uranium	0.0062	mg/L		0.0003		1	E200.8	04/11/08 20:22/eli-b
Vanadium	ND	mg/L		0.1		1	E200.8	04/11/08 20:22/eli-b
Zinc	0.04	mg/L		0.01		1	E200.8	04/11/08 20:22/eli-b
Calcium	223	mg/L		0.5		2	E200.7	04/12/08 01:57/eli-b
Magnesium	54.8	mg/L		0.5		2	E200.7	04/12/08 01:57/eli-b
Potassium	6.4	mg/L		0.5		2	E200.7	04/12/08 01:57/eli-b
Sodium	277	mg/L	D	2		2	E200.7	04/12/08 01:57/eli-b
Silica	46.3	mg/L		0.2		2	E200.7	04/12/08 01:57/eli-b

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030091-003  
Client Sample ID: DewBurd BVC04

Report Date: 07/29/08  
Collection Date: 03/09/08 11:15  
Date Received: 03/10/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.001	mg/L		0.001		1	A3114 B	03/19/08 11:16/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/19/08 09:18/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	03/19/08 12:04/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	03/19/08 11:38/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	03/19/08 09:42/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	03/19/08 12:04/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226	0.06	pCi/L	U			1	E903.0	03/26/08 11:40/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0	03/26/08 11:40/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0	03/26/08 11:40/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	03/31/08 14:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	03/31/08 14:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	-0.3	pCi/L	U			1	E903.0	05/16/08 11:48/eli-c
Radium 226 precision (±)	1.4	pCi/L				1	E903.0	05/16/08 11:48/eli-c
Radium 226 MDC	2.6	pCi/L				1	E903.0	05/16/08 11:48/eli-c
Thorium 230	1	pCi/L		0.2		1	E907.0	04/02/08 15:30/eli-c
Thorium 230 precision (±)	0.6	pCi/L				1	E907.0	04/02/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	8.8	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Alpha precision (±)	5.7	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Alpha MDC	8.5	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Beta	2.9	pCi/L	U			1	E900.0	04/02/08 20:04/eli-c
Gross Beta precision (±)	4.3	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Beta MDC	7.1	pCi/L				1	E900.0	04/02/08 20:04/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	03/14/08 16:57/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	03/14/08 16:57/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	-0.2	pCi/L	U			1	E903.0	04/20/08 17:48/eli-c
Radium 226 precision (±)	1.4	pCi/L				1	E903.0	04/20/08 17:48/eli-c
Thorium 230	1.0	pCi/L		0.2		1	E907.0	04/20/08 17:48/eli-c
Thorium 230 precision (±)	0.6	pCi/L				1	E907.0	04/20/08 17:48/eli-c

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030091-003  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/29/08  
**Collection Date:** 03/09/08 11:15  
**Date Received:** 03/10/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	03/24/08 12:32/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.79	%				1	A1030 E	05/08/08 09:40/krs
Anions	27.9	meq/L				1	A1030 E	05/08/08 09:40/krs
Cations	27.0	meq/L				1	A1030 E	05/08/08 09:40/krs
Solids, Total Dissolved Calculated	1730	mg/L				1	A1030 E	05/08/08 09:40/krs
TDS Balance (0.80 - 1.20)	1.02	dec. %				1	A1030 E	05/08/08 09:40/krs

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 12 of 24

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08040178-003  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 06/24/08  
**Collection Date:** 04/14/08 14:55  
**Date Received:** 04/15/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	04/15/08 11:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	186	mg/L		5		1	A2320 B	04/16/08 12:20/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	04/16/08 12:20/mb
Bicarbonate as HCO3	227	mg/L		5		1	A2320 B	04/16/08 12:20/mb
Calcium	455	mg/L		0.5		2	E200.7	05/06/08 16:56/eli-c
Chloride	1730	mg/L	D	20		200	E300.0	04/18/08 18:32/jmh
Fluoride	ND	mg/L		0.1		1	E300.0	04/16/08 20:29/jmh
Magnesium	177	mg/L		0.5		2	E200.7	05/06/08 16:56/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	04/17/08 14:37/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	04/16/08 20:29/jmh
Potassium	6	mg/L		1		2	E200.7	05/06/08 16:56/eli-c
Silica	2.6	mg/L		0.5		2	E200.7	05/05/08 11:37/eli-c
Sodium	995	mg/L		0.5		2	E200.7	05/05/08 11:37/eli-c
Sulfate	1860	mg/L	D	3		50	E300.0	04/16/08 20:14/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	7540	umhos/cm		5.0		1	A2510 B	04/21/08 16:56/jmh
pH	7.97	s.u.		0.01		1	A4500-H B	04/21/08 16:31/jmh
Sodium Adsorption Ratio (SAR)	10	unitless		0.10		1	Calculation	06/17/08 11:18/ADM
Solids, Suspended Sediment SSC @ 105 C	40	mg/L		5		1	D3977	04/23/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	5100	mg/L		5		1	A2540 C	04/16/08 16:23/mb
Solids, Total Suspended TSS @ 105 C	32	mg/L		5		1	A2540 D	04/16/08 08:26/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	05/05/08 11:37/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	05/07/08 00:44/eli-c
Barium	ND	mg/L		0.1		2	E200.7	05/06/08 16:56/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	05/05/08 11:37/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	05/07/08 00:44/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	05/05/08 11:37/eli-c
Copper	ND	mg/L		0.01		2	E200.7	05/05/08 11:37/eli-c
Iron	0.04	mg/L		0.03		2	E200.7	05/05/08 11:37/eli-c
Lead	ND	mg/L		0.001		1	E200.8	05/07/08 00:44/eli-c
Manganese	0.55	mg/L		0.01		2	E200.7	05/05/08 11:37/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	05/07/08 00:44/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	05/05/08 11:37/eli-c

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

**MCL - Maximum contaminant level.**  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040178-003  
Client Sample ID: DewBurd BVC04

Report Date: 06/24/08  
Collection Date: 04/14/08 14:55  
Date Received: 04/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		2	E200.7	05/06/08 16:56/eli-c
Silver	ND	mg/L		0.005		1	E200.8	05/07/08 00:44/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	05/07/08 00:44/eli-c
Uranium	0.0165	mg/L		0.0003		1	E200.8	05/07/08 00:44/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	05/05/08 11:37/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	05/06/08 16:56/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	05/01/08 20:32/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	05/01/08 20:32/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.7	mg/L		0.1		2	E200.7	04/29/08 00:15/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	04/26/08 01:19/eli-c
Barium	ND	mg/L		0.1		2	E200.7	04/29/08 00:15/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	04/29/08 00:15/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/26/08 01:19/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	04/26/08 01:19/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	04/15/08 00:00/ch
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	06/17/08 00:00/ADM
Copper	ND	mg/L		0.01		1	E200.8	04/26/08 01:19/eli-c
Iron	0.74	mg/L		0.03		2	E200.7	04/29/08 00:15/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/26/08 01:19/eli-c
Manganese	0.72	mg/L		0.01		1	E200.8	04/26/08 01:19/eli-c
Mercury	ND	mg/L		0.0001		1	E200.8	04/26/08 01:19/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	04/26/08 01:19/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/26/08 01:19/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/26/08 01:19/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/26/08 01:19/eli-c
Uranium	0.0169	mg/L		0.0003		1	E200.8	04/26/08 01:19/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	04/26/08 01:19/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	04/26/08 01:19/eli-c
Calcium	401	mg/L		0.5		2	E200.7	04/29/08 00:15/eli-c
Magnesium	161	mg/L		0.5		2	E200.7	04/29/08 00:15/eli-c
Potassium	14.4	mg/L		0.5		2	E200.7	04/29/08 00:15/eli-c
Silica	6.0	mg/L		0.5		2	E200.7	04/29/08 00:15/eli-c
Sodium	1070	mg/L		0.5		2	E200.7	04/29/08 00:15/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 10 of 16



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040178-003  
Client Sample ID: DewBurd BVC04

Report Date: 06/24/08  
Collection Date: 04/14/08 14:55  
Date Received: 04/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium	ND	mg/L		0.001			1	A3114 B	04/18/08 14:33/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	04/18/08 10:51/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	04/18/08 15:15/eli-c
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	ND	mg/L		0.001			1	A3114 B	04/18/08 14:49/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	04/18/08 11:08/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	04/18/08 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Radium 226	0.1	pCi/L	U				1	E903.0	05/06/08 09:47/eli-c
Radium 226 precision (±)	0.1	pCi/L					1	E903.0	05/06/08 09:47/eli-c
Radium 226 MDC	0.2	pCi/L					1	E903.0	05/06/08 09:47/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1	E907.0	04/25/08 11:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	04/25/08 11:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Radium 226	0.2	pCi/L	U				1	E903.0	05/05/08 09:46/eli-c
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	05/05/08 09:46/eli-c
Radium 226 MDC	0.8	pCi/L					1	E903.0	05/05/08 09:46/eli-c
Thorium 230	0.1	pCi/L	U				1	E907.0	04/21/08 15:00/eli-c
Thorium 230 precision (±)	0.3	pCi/L					1	E907.0	04/21/08 15:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	23.4	pCi/L					1	E900.0	05/09/08 01:51/eli-c
Gross Alpha precision (±)	14.2	pCi/L					1	E900.0	05/09/08 01:51/eli-c
Gross Alpha MDC	20.4	pCi/L					1	E900.0	05/09/08 01:51/eli-c
Gross Beta	2.8	pCi/L	U				1	E900.0	05/09/08 01:51/eli-c
Gross Beta precision (±)	11.2	pCi/L					1	E900.0	05/09/08 01:51/eli-c
Gross Beta MDC	18.8	pCi/L					1	E900.0	05/09/08 01:51/eli-c
Gross Gamma	0.0	pCi/L	U	20.0			1	E901.1	04/21/08 16:56/eli-c
Gross Gamma precision (±)	20	pCi/L					1	E901.1	04/21/08 16:56/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Radium 226	0.3	pCi/L	U				1	E903.0	05/28/08 18:43/eli-c
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	05/28/08 18:43/eli-c
Thorium 230	0.2	pCi/L	U	0.2			1	E907.0	05/28/08 18:43/eli-c
Thorium 230 precision (±)	0.3	pCi/L					1	E907.0	05/28/08 18:43/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 11 of 16

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08040178-003  
Client Sample ID: DewBurd BVC04

Report Date: 06/24/08  
Collection Date: 04/14/08 14:55  
Date Received: 04/15/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.001		1	E245.1	04/24/08 16:49/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-6.02					1	A1030 E	06/17/08 00:00/ADM
Anions	91.1	meq/L				1	A1030 E	06/17/08 00:00/ADM
Cations	80.8	meq/L				1	A1030 E	06/17/08 00:00/ADM
Solids, Total Dissolved Calculated	5340	mg/L				1	A1030 E	06/17/08 00:00/ADM
TDS Balance (0.80 - 1.20)	0.960					1	A1030 E	06/17/08 00:00/ADM

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050356-004  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/30/08  
**Collection Date:** 05/26/08 16:30  
**Date Received:** 05/27/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	1200	CFU/100ml	D	100			A9222 D	05/27/08 12:40/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	84	mg/L		5			A2320 B	06/02/08 11:12/mb
Carbonate as CO3	ND	mg/L		5			A2320 B	06/02/08 11:12/mb
Bicarbonate as HCO3	102	mg/L		5			A2320 B	06/02/08 11:12/mb
Calcium	51.5	mg/L		0.5			E200.7	06/16/08 19:16/eli-c
Chloride	9	mg/L		1			E300.0	05/28/08 22:09/jmh
Fluoride	0.6	mg/L		0.1			E300.0	05/28/08 22:09/jmh
Magnesium	13.2	mg/L		0.5			E200.7	06/16/08 19:16/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1			A4500-NH3 G	05/28/08 13:42/jmh
Nitrogen, Nitrate as N	0.3	mg/L		0.1			E300.0	05/28/08 22:09/jmh
Potassium	6	mg/L		1			E200.7	06/16/08 19:16/eli-c
Silica	2.8	mg/L		0.5			E200.7	06/16/08 19:16/eli-c
Sodium	89	mg/L	D	2			E200.7	06/16/08 19:16/eli-c
Sulfate	286	mg/L	D	3			E300.0	05/28/08 21:53/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	784	umhos/cm		5.0			A2510 B	05/29/08 15:11/tb
pH	7.71	s.u.		0.01			A4500-H B	05/29/08 14:14/tb
Sodium Adsorption Ratio (SAR)	2.8	unitless		0.10			Calculation	07/21/08 11:31/ADM
Solids, Suspended Sediment SSC @ 105 C	2700	mg/L		5			D3977	05/29/08 16:07/mb
Solids, Total Dissolved TDS @ 180 C	520	mg/L		5			A2540 C	05/30/08 11:54/mb
Solids, Total Suspended TSS @ 105 C	2200	mg/L		5			A2540 D	05/28/08 09:22/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1			E200.7	06/16/08 19:16/eli-c
Arsenic	ND	mg/L		0.001			E200.8	06/22/08 18:59/eli-c
Barium	ND	mg/L		0.1			E200.7	06/16/08 19:16/eli-c
Boron	0.2	mg/L		0.1			E200.7	06/16/08 19:16/eli-c
Cadmium	ND	mg/L		0.005			E200.8	06/22/08 18:59/eli-c
Chromium	ND	mg/L		0.01			E200.7	06/16/08 19:16/eli-c
Copper	ND	mg/L		0.01			E200.8	06/22/08 18:59/eli-c
Iron	0.04	mg/L		0.03			E200.7	06/16/08 19:16/eli-c
Lead	ND	mg/L		0.001			E200.8	06/22/08 18:59/eli-c
Manganese	ND	mg/L		0.01			E200.7	06/16/08 19:16/eli-c
Mercury	ND	mg/L		0.001			E200.8	06/22/08 18:59/eli-c
Molybdenum	ND	mg/L		0.1			E200.7	06/16/08 19:16/eli-c
Nickel	ND	mg/L		0.01			E200.7	06/16/08 19:16/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050356-004  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/30/08  
**Collection Date:** 05/26/08 16:30  
**Date Received:** 05/27/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Silver	ND	mg/L		0.005		1	E200.8	06/22/08 18:59/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	06/22/08 18:59/eli-c
Uranium	0.0017	mg/L		0.0003		1	E200.8	06/22/08 18:59/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	06/16/08 19:16/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	06/16/08 19:16/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.009	mg/L		0.001		1	E200.8	06/23/08 11:34/eli-c
Uranium	0.0021	mg/L		0.0003		1	E200.8	06/23/08 11:34/eli-c
<b>METALS - TOTAL</b>								
Aluminum	61.3	mg/L		0.1		2	E200.7	06/12/08 18:28/eli-c
Arsenic	0.023	mg/L	D	0.003		5	E200.8	06/14/08 00:28/eli-c
Barium	0.5	mg/L		0.1		2	E200.7	06/12/08 18:28/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	06/12/08 18:28/eli-c
Cadmium	ND	mg/L		0.005		2	E200.7	06/12/08 18:28/eli-c
Chromium	0.08	mg/L		0.05		2	E200.7	06/12/08 18:28/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	05/27/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	07/21/08 00:00/jmh
Copper	0.07	mg/L		0.01		2	E200.7	06/12/08 18:28/eli-c
Iron	63.1	mg/L		0.03		2	E200.7	06/12/08 18:28/eli-c
Lead	0.047	mg/L		0.001		5	E200.8	06/14/08 00:28/eli-c
Manganese	1.34	mg/L		0.01		2	E200.7	06/12/08 18:28/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	06/12/08 18:28/eli-c
Nickel	0.08	mg/L		0.05		2	E200.7	06/12/08 18:28/eli-c
Silver	ND	mg/L		0.005		1	E200.8	06/17/08 21:36/eli-c
Thorium 232	0.021	mg/L		0.005		5	E200.8	06/14/08 00:28/eli-c
Uranium	0.0069	mg/L		0.0003		5	E200.8	06/14/08 00:28/eli-c
Vanadium	0.2	mg/L		0.1		2	E200.7	06/12/08 18:28/eli-c
Zinc	0.27	mg/L		0.01		2	E200.7	06/12/08 18:28/eli-c
Calcium	81.3	mg/L		0.5		2	E200.7	06/12/08 18:28/eli-c
Magnesium	32.8	mg/L		0.5		2	E200.7	06/12/08 18:28/eli-c
Potassium	20.4	mg/L		0.5		2	E200.7	06/12/08 18:28/eli-c
Silica	77.6	mg/L		0.5		2	E200.7	06/12/08 18:28/eli-c
Sodium	96	mg/L	D	1		2	E200.7	06/12/08 18:28/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	06/20/08 15:57/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 10:54/eli-c

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

**MCL - Maximum contaminant level.**  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050356-004  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/30/08  
**Collection Date:** 05/26/08 16:30  
**Date Received:** 05/27/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	06/20/08 16:41/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	06/20/08 11:30/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	06/20/08 16:54/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	0.9	pCi/L	U			1	E909.0M	07/08/08 11:20/eli-c
Lead 210 MDC	9.6	pCi/L				1	E909.0M	07/08/08 11:20/eli-c
Lead 210 precision (±)	5.8	pCi/L				1	E909.0M	07/08/08 11:20/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008	06/17/08 12:00/eli-c
Polonium 210 precision (±)	1.0	pCi/L				1	RMO-3008	06/17/08 12:00/eli-c
Radium 226	-0.06	pCi/L	U			1	E903.0	06/19/08 00:49/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	06/19/08 00:49/eli-c
Radium 226 MDC	0.3	pCi/L				1	E903.0	06/19/08 00:49/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	06/16/08 13:30/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	06/16/08 13:30/eli-c
- For Ra226, the sample specific Minimum Detectable Concentration (MDC) as required by USNRC Regulatory Guide 4.14 could not be achieved on this sample due to significant matrix interferences.								
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-30	pCi/L	U			1	E909.0M	06/11/08 06:30/eli-c
Lead 210 precision (±)	41.5	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Lead 210 MDC	70.7	pCi/L				1	E909.0M	06/11/08 06:30/eli-c
Polonium 210	3.7	pCi/L		1.0		1	RMO-3008	07/01/08 14:30/eli-c
Polonium 210 precision (±)	2.9	pCi/L				1	RMO-3008	07/01/08 14:30/eli-c
Radium 226	2.2	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 precision (±)	1.6	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Radium 226 MDC	2.2	pCi/L				1	E903.0	06/17/08 09:15/eli-c
Thorium 230	2.1	pCi/L		0.2		1	E907.0	06/13/08 13:30/eli-c
Thorium 230 precision (±)	1.1	pCi/L				1	E907.0	06/13/08 13:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	12.5	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha precision (±)	2.7	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Alpha MDC	3.1	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta	12.9	pCi/L				1	E900.0	06/28/08 01:42/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	06/28/08 01:42/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08050356-004  
**Client Sample ID:** DewBurd BVC04

**Report Date:** 07/30/08  
**Collection Date:** 05/26/08 16:30  
**Date Received:** 05/27/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>RADIONUCLIDES - TOTAL</b>									
Gross Beta MDC	3.8	pCi/L					1	E900.0	06/28/08 01:42/eli-c
Gross Gamma	0.0	pCi/L	U	20.0			1	E901.1	06/04/08 12:00/eli-c
Gross Gamma precision (±)	20	pCi/L					1	E901.1	06/04/08 12:00/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	-33	pCi/L	U				1	E909.0M	07/18/08 17:46/eli-c
Lead 210 precision (±)	42	pCi/L					1	E909.0M	07/18/08 17:46/eli-c
Polonium 210	3.8	pCi/L		1.0			1	RMO-3008	07/18/08 17:46/eli-c
Polonium 210 precision (±)	3.1	pCi/L					1	RMO-3008	07/18/08 17:46/eli-c
Radium 226	2.2	pCi/L	U				1	E903.0	07/18/08 17:46/eli-c
Radium 226 precision (±)	1.6	pCi/L					1	E903.0	07/18/08 17:46/eli-c
Thorium 230	2.1	pCi/L		0.2			1	E907.0	07/18/08 17:46/eli-c
Thorium 230 precision (±)	1.2	pCi/L					1	E907.0	07/18/08 17:46/eli-c
<b>TOTAL METALS ANALYSES</b>									
Mercury	ND	mg/L		0.0001			1	E245.1	06/17/08 11:31/eli-b
<b>DATA QUALITY</b>									
A/C Balance (± 5)	-1.82	%					1	A1030 E	07/21/08 00:00/jmh
Anions	7.96	meq/L					1	A1030 E	07/21/08 00:00/jmh
Cations	7.68	meq/L					1	A1030 E	07/21/08 00:00/jmh
Solids, Total Dissolved Calculated	516	mg/L					1	A1030 E	07/21/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.02						1	A1030 E	07/21/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060315-004  
Client Sample ID: DewBurd BVC04

Report Date: 08/15/08  
Collection Date: 06/17/08 12:20  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	44	CFU/100ml	D	2		2	A9222 D	06/18/08 10:55/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	148	mg/L		5		1	A2320 B	06/25/08 10:39/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 10:39/mb
Bicarbonate as HCO3	180	mg/L		5		1	A2320 B	06/25/08 10:39/mb
Calcium	300	mg/L		0.5		2	E200.7	07/08/08 18:48/eli-c
Chloride	739	mg/L	D	10		100	E300.0	06/20/08 23:16/jmh
Fluoride	0.7	mg/L		0.1		1	E300.0	06/19/08 20:04/jmh
Magnesium	105	mg/L		0.5		2	E200.7	07/08/08 18:48/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/19/08 12:05/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/19/08 20:04/jmh
Potassium	9	mg/L		1		2	E200.7	07/08/08 18:48/eli-c
Silica	4.1	mg/L		0.5		2	E200.7	07/08/08 18:48/eli-c
Sodium	743	mg/L	D	2		2	E200.7	07/08/08 18:48/eli-c
Sulfate	1090	mg/L	D	7		100	E300.0	06/20/08 23:16/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	514	umhos/cm		5.0		1	A2510 B	06/19/08 14:46/tb
pH	8.14	s.u.		0.01		1	A4500-H B	06/19/08 11:59/tb
Sodium Adsorption Ratio (SAR)	9.4	unitless		0.10		1	Calculation	07/30/08 09:24/ADM
Solids, Suspended Sediment SSC @ 105 C	51	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	3500	mg/L		5		1	A2540 C	06/18/08 15:39/mb
Solids, Total Suspended TSS @ 105 C	55	mg/L		5		1	A2540 D	06/18/08 15:06/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	07/08/08 18:48/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/17/08 16:24/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 18:48/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	07/08/08 18:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 16:24/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	07/08/08 18:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/17/08 16:24/eli-c
Iron	ND	mg/L		0.03		2	E200.7	07/08/08 18:48/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/17/08 16:24/eli-c
Manganese	0.28	mg/L		0.01		2	E200.7	07/08/08 18:48/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/17/08 16:24/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 18:48/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

Page 13 of 16





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060315-004  
Client Sample ID: DewBurd BVC04

Report Date: 08/15/08  
Collection Date: 06/17/08 12:20  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		2	E200.7	07/08/08 18:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 16:24/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/17/08 16:24/eli-c
Uranium	0.0078	mg/L		0.0003		1	E200.8	07/17/08 16:24/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/08/08 18:48/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/08/08 18:48/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	07/17/08 22:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/17/08 22:38/eli-c
<b>METALS - TOTAL</b>								
Aluminum	3.2	mg/L		0.1		2	E200.7	07/08/08 22:48/eli-c
Arsenic	0.004	mg/L	D	0.002		1	E200.8	07/17/08 07:46/eli-c
Barium	0.1	mg/L		0.1		2	E200.7	07/08/08 22:48/eli-c
Boron	0.4	mg/L		0.1		2	E200.7	07/08/08 22:48/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 07:46/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 22:48/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	06/18/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	07/30/08 00:00/jmh
Copper	ND	mg/L		0.01		2	E200.7	07/08/08 22:48/eli-c
Iron	2.69	mg/L		0.03		2	E200.7	07/08/08 22:48/eli-c
Lead	0.002	mg/L		0.001		1	E200.8	07/17/08 07:46/eli-c
Manganese	0.44	mg/L		0.01		2	E200.7	07/08/08 22:48/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 22:48/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/08/08 22:48/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/17/08 21:38/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/17/08 07:46/eli-c
Uranium	0.0097	mg/L		0.0003		1	E200.8	07/17/08 07:46/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/08/08 22:48/eli-c
Zinc	0.02	mg/L		0.01		2	E200.7	07/08/08 22:48/eli-c
Calcium	309	mg/L		0.5		2	E200.7	07/08/08 22:48/eli-c
Magnesium	111	mg/L		0.5		2	E200.7	07/08/08 22:48/eli-c
Potassium	9.7	mg/L		0.5		2	E200.7	07/08/08 22:48/eli-c
Silica	12.9	mg/L		0.5		2	E200.7	07/08/08 22:48/eli-c
Sodium	770	mg/L	D	1		2	E200.7	07/08/08 22:48/eli-c

METALS - DISSOLVED - SPECIATED

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.	Page 14 of 16
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.	
	MDC - Minimum detectable concentration	D - RL increased due to sample matrix interference.	



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060315-004  
Client Sample ID: DewBurd BVC04

Report Date: 08/15/08  
Collection Date: 06/17/08 12:20  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1 A3114 B	07/19/08 14:35/eli-c
Selenium-IV	ND	mg/L		0.001		1 A3114 B	07/19/08 11:35/eli-c
Selenium-VI	ND	mg/L		0.001		1 A3114 B	07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1 A3114 B	07/22/08 14:55/eli-c
Selenium-IV	ND	mg/L		0.001		1 A3114 B	07/22/08 11:10/eli-c
Selenium-VI	ND	mg/L		0.001		1 A3114 B	07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Radium 226	0.1	pCi/L	U			1 E903.0	07/20/08 00:41/eli-c
Radium 226 precision (±)	0.1	pCi/L				1 E903.0	07/20/08 00:41/eli-c
Radium 226 MDC	0.1	pCi/L				1 E903.0	07/20/08 00:41/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1 E907.0	07/17/08 09:01/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1 E907.0	07/17/08 09:01/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Radium 226	-0.7	pCi/L	U			1 E903.0	07/15/08 14:46/eli-c
Radium 226 precision (±)	0.4	pCi/L				1 E903.0	07/15/08 14:46/eli-c
Radium 226 MDC	0.9	pCi/L				1 E903.0	07/15/08 14:46/eli-c
Thorium 230	0.3	pCi/L		0.2		1 E907.0	07/13/08 18:14/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1 E907.0	07/13/08 18:14/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	3.9	pCi/L	U			1 E900.0	07/22/08 12:23/eli-c
Gross Alpha precision (±)	9.1	pCi/L				1 E900.0	07/22/08 12:23/eli-c
Gross Alpha MDC	14.8	pCi/L				1 E900.0	07/22/08 12:23/eli-c
Gross Beta	-12.4	pCi/L	U			1 E900.0	07/22/08 12:23/eli-c
Gross Beta precision (±)	8.8	pCi/L				1 E900.0	07/22/08 12:23/eli-c
Gross Beta MDC	15.1	pCi/L				1 E900.0	07/22/08 12:23/eli-c
Gross Gamma	0.0	pCi/L	U	20.0		1 E901.1	06/20/08 16:37/eli-c
Gross Gamma precision (±)	20	pCi/L				1 E901.1	06/20/08 16:37/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>							
Radium 226	-0.53	pCi/L	U	0.2		1 E903.0	07/28/08 15:32/eli-c
Radium 226 precision (±)	0.4	pCi/L				1 E903.0	07/28/08 15:32/eli-c
Thorium 230	0.3	pCi/L		0.2		1 E907.0	07/28/08 15:32/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1 E907.0	07/28/08 15:32/eli-c

<b>Report</b>	RL - Analyte reporting limit.	MCL - Maximum contaminant level.	Page 15 of 16
<b>Definitions:</b>	QCL - Quality control limit.	ND - Not detected at the reporting limit.	
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration	





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060315-004  
Client Sample ID: DewBurd BVC04

Report Date: 08/15/08  
Collection Date: 06/17/08 12:20  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	06/30/08 08:51/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	9.39	%				1	A1030 E	07/30/08 00:00/jmh
Anions	46.6	meq/L				1	A1030 E	07/30/08 00:00/jmh
Cations	56.2	meq/L				1	A1030 E	07/30/08 00:00/jmh
Solids, Total Dissolved Calculated	3090	mg/L				1	A1030 E	07/30/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.12					1	A1030 E	07/30/08 00:00/jmh

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 16 of 16

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07070315-001  
**Client Sample ID:** DewBurd PSC01

**Revised Date:** 11/09/07  
**Report Date:** 09/03/07  
**Collection Date:** 07/19/07 10:45  
**Date Received:** 07/20/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	4000	CFU/100ml	D	10		10	A9222 D	07/20/07 10:45/jmh
Value is approximate. A small enough aliquot was not used to determine an accurate result.								
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO <sub>3</sub>	56	mg/L		5		1	A2320 B	07/23/07 17:44/jn
Carbonate as CO <sub>3</sub>	ND	mg/L		5		1	A2320 B	07/23/07 17:44/jn
Bicarbonate as HCO <sub>3</sub>	68	mg/L		5		1	A2320 B	07/23/07 17:44/jn
Calcium	510	mg/L	D	1		10	E200.7	08/03/07 13:28/eli-c
Chloride	2.8	mg/L		1.0		1	E300.0	07/20/07 20:58/jmh
Fluoride	0.14	mg/L		0.10		1	E300.0	07/20/07 20:58/jmh
Magnesium	30.5	mg/L		0.5		1	E200.7	08/02/07 21:57/eli-c
Nitrogen, Nitrate as N	0.77	mg/L		0.10		1	E300.0	07/20/07 20:58/jmh
Potassium	12.4	mg/L		0.5		1	E200.7	08/02/07 21:57/eli-c
Silica	16.5	mg/L		0.5		1	E200.7	08/02/07 21:57/eli-c
Sodium	6.3	mg/L		0.5		1	E200.7	08/02/07 21:57/eli-c
Sulfate	1400	mg/L		1.0		1	E300.0	07/20/07 20:58/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1840	umhos/cm		5		1	A2510 B	07/24/07 18:04/ch
pH	7.16	s.u.		0.01		1	A4500-H B	07/24/07 17:21/ch
Solids, Suspended Sediment SSC @ 105 C	134	mg/L		5		1	D3977	07/20/07 15:02/jn
Solids, Total Dissolved TDS @ 180 C	1700	mg/L		5		1	A2540 C	07/25/07 08:49/jn
Solids, Total Suspended TSS @ 105 C	150	mg/L		5		1	A2540 D	07/23/07 15:29/jn
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	08/02/07 01:27/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8	08/02/07 01:27/eli-c
<b>METALS - TOTAL</b>								
Arsenic	0.003	mg/L		0.001		10	E200.8	07/28/07 08:20/eli-c
Barium	0.2	mg/L		0.1		10	E200.8	07/28/07 08:20/eli-c
Boron	ND	mg/L		0.1		1	E200.7	08/02/07 21:57/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	07/28/07 08:20/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	07/28/07 08:20/eli-c
Copper	ND	mg/L		0.01		10	E200.8	07/28/07 08:20/eli-c
Iron	2.00	mg/L		0.03		1	E200.7	08/02/07 21:57/eli-c
Lead	0.002	mg/L		0.001		10	E200.8	07/28/07 08:20/eli-c
Manganese	0.16	mg/L		0.01		10	E200.8	07/28/07 08:20/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	07/28/07 08:20/eli-c

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 1 of 4

**Definitions:** QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07070315-001  
**Client Sample ID:** DewBurd PSC01

**Revised Date:** 11/09/07  
**Report Date:** 09/03/07  
**Collection Date:** 07/19/07 10:45  
**Date Received:** 07/20/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - TOTAL</b>								
Molybdenum	ND	mg/L		0.1		10	E200.8	07/28/07 08:20/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/28/07 08:20/eli-c
Selenium	0.002	mg/L	D	0.002		10	E200.8	07/28/07 08:20/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/28/07 08:20/eli-c
Uranium	0.0100	mg/L		0.0003		10	E200.8	07/28/07 08:20/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	07/28/07 08:20/eli-c
Zinc	0.03	mg/L		0.01		10	E200.8	07/28/07 08:20/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	8.8	pCi/L		1.0		1	E900.0	08/06/07 00:52/eli-c
Gross Alpha precision (±)	1.2	pCi/L				1	E900.0	08/06/07 00:52/eli-c
Gross Beta	15.1	pCi/L		2.0		1	E900.0	08/06/07 00:52/eli-c
Gross Beta precision (±)	3.6	pCi/L				1	E900.0	08/06/07 00:52/eli-c
Radium 226	0.7	pCi/L		0.2		1	E903.0	08/01/07 15:00/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	08/01/07 15:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-2.54	%				1	A1030 E	08/28/07 11:21/kl
Anions	30.5	meq/L				1	A1030 E	08/28/07 11:21/kl
Cations	29.0	meq/L				1	A1030 E	08/28/07 11:21/kl
Solids, Total Dissolved Calculated	2020	mg/L				1	A1030 E	08/28/07 11:21/kl
TDS Balance (0.80 - 1.20)	0.860	dec. %				1	A1030 E	08/28/07 11:21/kl

**Report Definitions:**  
 RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070340-001  
**Client Sample ID:** DewBurd PSC01

**Report Date:** 10/01/08  
**Collection Date:** 07/18/08 12:40  
**Date Received:** 07/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	3700	CFU/100ml	D	100		100	A9222 D	07/19/08 14:20/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	62	mg/L		5		1	A2320 B	07/22/08 10:26/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/22/08 10:26/mb
Bicarbonate as HCO3	76	mg/L		5		1	A2320 B	07/22/08 10:26/mb
Calcium	459	mg/L		0.5		2	E200.7	08/04/08 15:00/eli-c
Chloride	2	mg/L		1		1	E300.0	07/21/08 19:21/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	07/21/08 19:21/jmh
Magnesium	12.5	mg/L		0.5		2	E200.7	08/04/08 15:00/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	07/21/08 13:33/jmh
Nitrogen, Nitrate as N	0.6	mg/L	H	0.1		1	E300.0	07/21/08 19:21/jmh
Potassium	7	mg/L		1		2	E200.7	08/04/08 15:00/eli-c
Silica	1.7	mg/L		0.5		2	E200.7	08/04/08 15:00/eli-c
Sodium	2.6	mg/L		0.5		2	E200.7	08/04/08 15:00/eli-c
Sulfate	977	mg/L	D	3		50	E300.0	07/21/08 18:31/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1750	umhos/cm		5.0		1	A2510 B	07/22/08 09:57/tb
pH	7.24	s.u.		0.01		1	A4500-H B	07/22/08 09:19/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	09/25/08 08:17/ADM
Solids, Suspended Sediment SSC @ 105 C	4490	mg/L		5		1	D3977	07/28/08 10:10/mb
Solids, Total Dissolved TDS @ 180 C	1600	mg/L		5		1	A2540 C	07/23/08 11:44/mb
Solids, Total Suspended TSS @ 105 C	3700	mg/L		5		1	A2540 D	07/21/08 15:05/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	08/04/08 15:00/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	08/05/08 01:54/eli-c
Barium	0.1	mg/L		0.1		2	E200.7	08/04/08 15:00/eli-c
Boron	ND	mg/L		0.1		2	E200.7	08/04/08 15:00/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/05/08 01:54/eli-c
Chromium	0.02	mg/L		0.01		2	E200.7	08/04/08 15:00/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/05/08 01:54/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	08/04/08 15:00/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/05/08 01:54/eli-c
Manganese	0.04	mg/L		0.01		2	E200.7	08/04/08 15:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/05/08 01:54/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	08/04/08 15:00/eli-c
Nickel	0.03	mg/L		0.01		2	E200.7	08/04/08 15:00/eli-c

**Report** RL - Analyte reporting limit.

**MCL -** Maximum contaminant level.

Page 1 of 8

**Definitions:** QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

H - Analysis performed past recommended holding time.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070340-001  
**Client Sample ID:** DewBurd PSC01

**Report Date:** 10/01/08  
**Collection Date:** 07/18/08 12:40  
**Date Received:** 07/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Silver	ND	mg/L		0.005		1	E200.8	08/05/08 01:54/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/05/08 01:54/eli-c
Uranium	0.0050	mg/L		0.0003		1	E200.8	08/05/08 01:54/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	08/04/08 15:00/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	08/04/08 15:00/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.001	mg/L		0.001		1	E200.8	07/27/08 05:27/eli-c
Uranium	0.0005	mg/L		0.0003		1	E200.8	07/27/08 05:27/eli-c
<b>METALS - TOTAL</b>								
Aluminum	85.9	mg/L		0.1		2	E200.7	07/25/08 21:33/eli-c
Arsenic	0.031	mg/L		0.001		1	E200.8	08/04/08 20:02/eli-c
Barium	0.8	mg/L		0.1		2	E200.7	07/25/08 21:33/eli-c
Boron	0.3	mg/L		0.1		2	E200.7	07/25/08 21:33/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/04/08 20:02/eli-c
Chromium	0.17	mg/L		0.05		2	E200.7	07/25/08 21:33/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	07/19/08 00:00/mb
Chromium, Trivalent	0.17	mg/L		0.01		1	Calculation	09/25/08 00:00/jmh
Copper	0.10	mg/L		0.01		2	E200.7	07/25/08 21:33/eli-c
Iron	128	mg/L	D	0.2		2	E200.7	07/25/08 21:33/eli-c
Lead	0.074	mg/L		0.001		1	E200.8	08/04/08 20:02/eli-c
Manganese	2.55	mg/L		0.01		2	E200.7	07/25/08 21:33/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 21:33/eli-c
Nickel	0.15	mg/L		0.05		2	E200.7	07/25/08 21:33/eli-c
Silver	ND	mg/L		0.005		1	E200.8	08/04/08 20:02/eli-c
Thorium 232	0.020	mg/L		0.005		1	E200.8	08/04/08 20:02/eli-c
Uranium	0.0252	mg/L		0.0003		1	E200.8	08/04/08 20:02/eli-c
Vanadium	0.1	mg/L		0.1		2	E200.7	07/25/08 21:33/eli-c
Zinc	0.34	mg/L		0.01		2	E200.7	07/25/08 21:33/eli-c
Calcium	664	mg/L		0.5		2	E200.7	07/25/08 21:33/eli-c
Magnesium	164	mg/L		0.5		2	E200.7	07/25/08 21:33/eli-c
Potassium	46.1	mg/L		0.5		2	E200.7	07/25/08 21:33/eli-c
Silica	49.2	mg/L		0.5		2	E200.7	07/25/08 21:33/eli-c
Sodium	3	mg/L	D	1		2	E200.7	07/25/08 21:33/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	08/11/08 16:36/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/11/08 13:55/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070340-001  
**Client Sample ID:** DewBurd PSC01

**Report Date:** 10/01/08  
**Collection Date:** 07/18/08 12:40  
**Date Received:** 07/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium-VI	ND	mg/L		0.001			1	A3114 B	08/11/08 16:55/eli-c
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	ND	mg/L		0.001			1	A3114 B	08/11/08 16:53/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	08/11/08 14:15/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	08/11/08 16:55/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	2.2	pCi/L	U				1	E909.0M	08/11/08 10:51/eli-c
Lead 210 precision (±)	4.5	pCi/L					1	E909.0M	08/11/08 10:51/eli-c
Lead 210 MDC	7.4	pCi/L					1	E909.0M	08/11/08 10:51/eli-c
Polonium 210	0.7	pCi/L	U	1.0			1	RMO-3008	08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.70	pCi/L					1	RMO-3008	08/21/08 17:30/eli-c
Radium 226	0.1	pCi/L	U				1	E903.0	08/19/08 01:59/eli-c
Radium 226 precision (±)	0.1	pCi/L					1	E903.0	08/19/08 01:59/eli-c
Radium 226 MDC	0.2	pCi/L					1	E903.0	08/19/08 01:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2			1	E907.0	08/20/08 17:24/eli-c
Thorium 230 precision (±)	0.04	pCi/L					1	E907.0	08/20/08 17:24/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	0.9	pCi/L	U				1	E909.0M	08/11/08 09:30/eli-c
Lead 210 precision (±)	7.0	pCi/L					1	E909.0M	08/11/08 09:30/eli-c
Lead 210 MDC	11.8	pCi/L					1	E909.0M	08/11/08 09:30/eli-c
Polonium 210	0.3	pCi/L	U	1.0			1	RMO-3008	08/08/08 14:06/eli-c
Polonium 210 precision (±)	0.33	pCi/L					1	RMO-3008	08/08/08 14:06/eli-c
Radium 226	0.1	pCi/L	U				1	E903.0	08/11/08 11:25/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	08/11/08 11:25/eli-c
Radium 226 MDC	0.5	pCi/L					1	E903.0	08/11/08 11:25/eli-c
Thorium 230	0.5	pCi/L		0.2			1	E907.0	08/10/08 17:23/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	08/10/08 17:23/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	6.5	pCi/L	U				1	E900.0	09/04/08 18:47/eli-c
Gross Alpha precision (±)	6.9	pCi/L					1	E900.0	09/04/08 18:47/eli-c
Gross Alpha MDC	10.7	pCi/L					1	E900.0	09/04/08 18:47/eli-c
Gross Beta	1.4	pCi/L	U				1	E900.0	09/04/08 18:47/eli-c
Gross Beta precision (±)	6.9	pCi/L					1	E900.0	09/04/08 18:47/eli-c
Gross Beta MDC	11.5	pCi/L					1	E900.0	09/04/08 18:47/eli-c
Gross Gamma	0	pCi/L	U	20.0			1	E901.1	08/08/08 07:23/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration





LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070340-001  
Client Sample ID: DewBurd PSC01

Report Date: 10/01/08  
Collection Date: 07/18/08 12:40  
Date Received: 07/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>RADIONUCLIDES - TOTAL</b>									
Gross Gamma precision (±)	20	pCi/L					1	E901.1	08/08/08 07:23/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	3	pCi/L	U				1	E909.0M	09/24/08 17:25/eli-c
Lead 210 precision (±)	8	pCi/L					1	E909.0M	09/24/08 17:25/eli-c
Lead 210 MDC	14	pCi/L					1	E909.0M	09/24/08 17:25/eli-c
Polonium 210	1.0	pCi/L	U	1.0			1	RMO-3008	09/24/08 17:25/eli-c
Polonium 210 precision (±)	0.77	pCi/L					1	RMO-3008	09/24/08 17:25/eli-c
Radium 226	0.2	pCi/L	U				1	E903.0	09/24/08 17:25/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	09/24/08 17:25/eli-c
Radium 226 MDC	0.6	pCi/L					1	E903.0	09/24/08 17:25/eli-c
Thorium 230	0.5	pCi/L		0.2			1	E907.0	09/24/08 17:25/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	09/24/08 17:25/eli-c
<b>TOTAL METALS ANALYSES</b>									
Mercury	ND	mg/L		0.0002			1	E245.1	07/29/08 12:11/eli-b
<b>DATA QUALITY</b>									
A/C Balance (± 5)	5.55	%					1	A1030 E	09/25/08 00:00/jmh
Anions	21.7	meq/L					1	A1030 E	09/25/08 00:00/jmh
Cations	24.2	meq/L					1	A1030 E	09/25/08 00:00/jmh
Solids, Total Dissolved Calculated	1510	mg/L					1	A1030 E	09/25/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.07						1	A1030 E	09/25/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-001  
Client Sample ID: DewBurd PSC01-2

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	104	mg/L		5		1	A2320 B	07/22/08 10:38/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/22/08 10:38/mb
Bicarbonate as HCO3	127	mg/L		5		1	A2320 B	07/22/08 10:38/mb
Calcium	422	mg/L		0.5		2	E200.7	09/09/08 20:34/eli-c
Chloride	2	mg/L		1		1	E300.0	07/21/08 20:59/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	07/21/08 20:59/jmh
Magnesium	20.3	mg/L		0.5		2	E200.7	09/09/08 20:34/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	07/30/08 12:09/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/21/08 20:59/jmh
Potassium	10	mg/L		1		2	E200.7	09/09/08 20:34/eli-c
Silica	5.2	mg/L		0.5		2	E200.7	09/09/08 20:34/eli-c
Sodium	4	mg/L	D	2		2	E200.7	09/09/08 20:34/eli-c
Sulfate	1040	mg/L	D	3		50	E300.0	07/21/08 20:43/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1710	umhos/cm		5.0		1	A2510 B	07/22/08 10:01/tb
pH	7.12	s.u.		0.01		1	A4500-H B	07/22/08 09:24/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	09/03/08 14:21/ADM
Solids, Suspended Sediment SSC @ 105 C	9760	mg/L		5		1	D3977	07/28/08 10:13/mb
Solids, Total Dissolved TDS @ 180 C	1600	mg/L		5		1	A2540 C	07/23/08 11:46/mb
Solids, Total Suspended TSS @ 105 C	12000	mg/L		5		1	A2540 D	07/21/08 15:07/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		10	E200.8	08/06/08 17:11/eli-c
Arsenic	0.008	mg/L		0.001		1	E200.8	08/05/08 19:41/eli-c
Barium	0.3	mg/L		0.1		1	E200.8	08/05/08 19:41/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/09/08 20:34/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/05/08 19:41/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	08/05/08 19:41/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/05/08 19:41/eli-c
Iron	0.10	mg/L		0.03		2	E200.7	09/09/08 20:34/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/05/08 19:41/eli-c
Manganese	0.81	mg/L		0.01		1	E200.8	08/05/08 19:41/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/05/08 19:41/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	08/05/08 19:41/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	08/05/08 19:41/eli-c
Silver	ND	mg/L		0.005		10	E200.8	08/06/08 17:11/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/05/08 19:41/eli-c
Uranium	0.0016	mg/L		0.0003		1	E200.8	08/05/08 19:41/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-001  
Client Sample ID: DewBurd PSC01-2

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED</b>								
Vanadium	ND	mg/L		0.1		1	E200.8	08/05/08 19:41/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	08/05/08 19:41/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.038	mg/L		0.001		5	E200.8	08/14/08 16:33/eli-c
Uranium	0.0131	mg/L		0.0003		5	E200.8	07/29/08 18:35/eli-c
<b>METALS - TOTAL</b>								
Aluminum	233	mg/L		0.1		2	E200.7	08/04/08 18:45/eli-c
Arsenic	0.073	mg/L		0.001		10	E200.8	08/01/08 01:48/eli-c
Barium	1.2	mg/L		0.1		10	E200.8	08/01/08 01:48/eli-c
Boron	0.6	mg/L		0.1		2	E200.7	08/04/08 18:45/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	08/01/08 01:48/eli-c
Chromium	0.34	mg/L		0.05		10	E200.8	08/01/08 01:48/eli-c
Copper	0.21	mg/L		0.01		10	E200.8	08/01/08 01:48/eli-c
Iron	253	mg/L	D	0.2		2	E200.7	08/04/08 18:45/eli-c
Lead	0.144	mg/L		0.001		10	E200.8	08/01/08 01:48/eli-c
Manganese	6.34	mg/L		0.01		10	E200.8	08/01/08 01:48/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	08/01/08 01:48/eli-c
Nickel	0.33	mg/L		0.05		10	E200.8	08/01/08 01:48/eli-c
Silver	ND	mg/L		0.005		10	E200.8	08/01/08 12:30/eli-c
Thorium 232	0.042	mg/L		0.005		10	E200.8	08/01/08 12:30/eli-c
Uranium	0.0206	mg/L		0.0003		10	E200.8	08/01/08 01:48/eli-c
Vanadium	0.5	mg/L	D	0.2		10	E200.8	08/01/08 01:48/eli-c
Zinc	0.73	mg/L		0.01		10	E200.8	08/01/08 01:48/eli-c
Calcium	949	mg/L		0.5		2	E200.7	08/04/08 18:45/eli-c
Magnesium	387	mg/L		0.5		2	E200.7	08/04/08 18:45/eli-c
Potassium	87.5	mg/L		0.5		2	E200.7	08/04/08 18:45/eli-c
Silica	64.0	mg/L		0.5		2	E200.7	08/04/08 18:45/eli-c
Sodium	6	mg/L	D	1		2	E200.7	08/04/08 18:45/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	08/15/08 15:28/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/15/08 11:50/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	08/15/08 15:52/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226	0.3	pCi/L				1	E903.0	08/20/08 09:09/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	08/20/08 09:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-001  
Client Sample ID: DewBurd PSC01-2

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Table with columns: Analyses, Result, Units, Qual, RL, MCL/QCL, DF, Method, Analysis Date / By. Rows include RADIONUCLIDES - DISSOLVED, RADIONUCLIDES - SUSPENDED, RADIONUCLIDES - TOTAL, RADIONUCLIDES - TOTAL - CALCULATED, TOTAL METALS ANALYSES, and DATA QUALITY.

Report RL - Analyte reporting limit. MCL - Maximum contaminant level. Page 3 of 9  
Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.  
MDC - Minimum detectable concentration U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07070315-002  
Client Sample ID: DewBurd PSC02

Revised Date: 11/09/07  
Report Date: 09/03/07  
Collection Date: 07/19/07 11:30  
Date Received: 07/20/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>MICROBIOLOGICAL</b>							
Bacteria, Fecal Coliform	4400	CFU/100ml	D	10		A9222 D	07/20/07 10:45/jmh
Value is approximate. A small enough aliquot was not used to determine an accurate result.							
<b>MAJOR IONS</b>							
Alkalinity, Total as CaCO3	50	mg/L		5		A2320 B	07/23/07 17:43/jn
Carbonate as CO3	ND	mg/L		5		A2320 B	07/23/07 17:43/jn
Bicarbonate as HCO3	61	mg/L		5		A2320 B	07/23/07 17:43/jn
Calcium	270	mg/L		1		E200.7	08/02/07 22:54/eli-c
Chloride	1.6	mg/L		1.0		E300.0	07/20/07 21:47/jmh
Fluoride	0.14	mg/L		0.10		E300.0	07/20/07 21:47/jmh
Magnesium	18	mg/L		1		E200.7	08/02/07 22:54/eli-c
Nitrogen, Nitrate as N	0.56	mg/L		0.10		E300.0	07/20/07 21:47/jmh
Potassium	8	mg/L		1		E200.7	08/02/07 22:54/eli-c
Silica	7	mg/L		1		E200.7	08/02/07 22:54/eli-c
Sodium	2	mg/L		1		E200.7	08/02/07 22:54/eli-c
Sulfate	645	mg/L	D	14		E300.0	07/26/07 01:01/jmh
<b>PHYSICAL PROPERTIES</b>							
Conductivity @ 25 C	1240	umhos/cm		5		A2510 B	07/24/07 18:04/ch
pH	7.26	s.u.		0.01		A4500-H B	07/24/07 17:22/ch
Solids, Suspended Sediment SSC @ 105 C	108	mg/L		5		D3977	07/20/07 15:02/jn
Solids, Total Dissolved TDS @ 180 C	1100	mg/L		5		A2540 C	07/23/07 11:53/jn
Solids, Total Suspended TSS @ 105 C	140	mg/L		5		A2540 D	07/23/07 15:30/jn
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001		E200.8	08/02/07 01:33/eli-c
Uranium	0.0005	mg/L		0.0003		E200.8	08/02/07 01:33/eli-c
<b>METALS - TOTAL</b>							
Arsenic	0.003	mg/L		0.001		E200.8	07/28/07 08:27/eli-c
Barium	0.3	mg/L		0.1		E200.8	07/28/07 08:27/eli-c
Boron	ND	mg/L		0.1		E200.7	08/02/07 22:04/eli-c
Cadmium	ND	mg/L		0.005		E200.8	07/28/07 08:27/eli-c
Chromium	ND	mg/L		0.05		E200.8	07/28/07 08:27/eli-c
Copper	ND	mg/L		0.01		E200.8	07/28/07 08:27/eli-c
Iron	0.28	mg/L		0.03		E200.7	08/02/07 22:54/eli-c
Lead	0.002	mg/L		0.001		E200.8	07/28/07 08:27/eli-c
Manganese	0.12	mg/L		0.01		E200.8	07/28/07 08:27/eli-c
Mercury	ND	mg/L		0.001		E200.8	07/28/07 08:27/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 3 of 4

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07070315-002  
Client Sample ID: DewBurd PSC02

Revised Date: 11/09/07  
Report Date: 09/03/07  
Collection Date: 07/19/07 11:30  
Date Received: 07/20/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		DF	Method	Analysis Date / By
				RL	QCL			
<b>METALS - TOTAL</b>								
Molybdenum	ND	mg/L		0.1		10	E200.8	07/28/07 08:27/eli-c
Nickel	ND	mg/L		0.05		10	E200.8	07/28/07 08:27/eli-c
Selenium	0.003	mg/L	D	0.002		10	E200.8	07/28/07 08:27/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/28/07 08:27/eli-c
Uranium	0.0012	mg/L		0.0003		10	E200.8	07/28/07 08:27/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	07/28/07 08:27/eli-c
Zinc	0.02	mg/L		0.01		10	E200.8	07/28/07 08:27/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	1.9	pCi/L		1.0		1	E900.0	08/06/07 00:52/eli-c
Gross Alpha precision (±)	0.7	pCi/L				1	E900.0	08/06/07 00:52/eli-c
Gross Beta	11.9	pCi/L		2.0		1	E900.0	08/06/07 00:52/eli-c
Gross Beta precision (±)	2.4	pCi/L				1	E900.0	08/06/07 00:52/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	08/01/07 15:00/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.42	%				1	A1030 E	08/28/07 11:21/lkl
Anions	14.5	meq/L				1	A1030 E	08/28/07 11:21/lkl
Cations	15.6	meq/L				1	A1030 E	08/28/07 11:21/lkl
Solids, Total Dissolved Calculated	998	mg/L				1	A1030 E	08/28/07 11:21/lkl
TDS Balance (0.80 - 1.20)	1.07	dec. %				1	A1030 E	08/28/07 11:21/lkl

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 4 of 4

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070340-002  
**Client Sample ID:** DewBurd PSC02

**Report Date:** 10/01/08  
**Collection Date:** 07/18/08 14:25  
**Date Received:** 07/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	7500	CFU/100ml	D	100			100	A9222 D 07/19/08 14:20/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	60	mg/L		5			1	A2320 B 07/22/08 10:30/mb
Carbonate as CO3	ND	mg/L		5			1	A2320 B 07/22/08 10:30/mb
Bicarbonate as HCO3	73	mg/L		5			1	A2320 B 07/22/08 10:30/mb
Calcium	439	mg/L		0.5			2	E200.7 08/04/08 15:08/eli-c
Chloride	2	mg/L		1			1	E300.0 07/21/08 19:54/jmh
Fluoride	0.2	mg/L		0.1			1	E300.0 07/21/08 19:54/jmh
Magnesium	10.1	mg/L		0.5			2	E200.7 08/04/08 15:08/eli-c
Nitrogen, Ammonia as N	0.2	mg/L		0.1			1	A4500-NH3 G 07/21/08 13:37/jmh
Nitrogen, Nitrate as N	0.6	mg/L	H	0.1			1	E300.0 07/21/08 19:54/jmh
Potassium	6	mg/L		1			2	E200.7 08/04/08 15:08/eli-c
Silica	1.8	mg/L		0.5			2	E200.7 08/04/08 15:08/eli-c
Sodium	1.7	mg/L		0.5			2	E200.7 08/04/08 15:08/eli-c
Sulfate	909	mg/L	D	3			50	E300.0 07/21/08 19:37/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1520	umhos/cm		5.0			1	A2510 B 07/22/08 09:58/tb
pH	7.34	s.u.		0.01			1	A4500-H B 07/22/08 09:20/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10			1	Calculation 09/25/08 08:17/ADM
Solids, Suspended Sediment SSC @ 105 C	2370	mg/L		5			1	D3977 07/28/08 10:12/mb
Solids, Total Dissolved TDS @ 180 C	1500	mg/L		5			1	A2540 C 07/23/08 11:45/mb
Solids, Total Suspended TSS @ 105 C	2000	mg/L		5			1	A2540 D 07/21/08 15:06/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1			2	E200.7 08/04/08 15:08/eli-c
Arsenic	0.002	mg/L		0.001			1	E200.8 08/05/08 02:01/eli-c
Barium	ND	mg/L		0.1			2	E200.7 08/04/08 15:08/eli-c
Boron	ND	mg/L		0.1			2	E200.7 08/04/08 15:08/eli-c
Cadmium	ND	mg/L		0.005			1	E200.8 08/05/08 02:01/eli-c
Chromium	ND	mg/L		0.01			2	E200.7 08/04/08 15:08/eli-c
Copper	ND	mg/L		0.01			1	E200.8 08/05/08 02:01/eli-c
Iron	ND	mg/L		0.03			2	E200.7 08/04/08 15:08/eli-c
Lead	ND	mg/L		0.001			1	E200.8 08/05/08 02:01/eli-c
Manganese	0.03	mg/L		0.01			2	E200.7 08/04/08 15:08/eli-c
Mercury	ND	mg/L		0.001			1	E200.8 08/05/08 02:01/eli-c
Molybdenum	ND	mg/L		0.1			2	E200.7 08/04/08 15:08/eli-c
Nickel	ND	mg/L		0.01			2	E200.7 08/04/08 15:08/eli-c

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 5 of 8

**Definitions:** QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix interference.

H - Analysis performed past recommended holding time.





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070340-002  
**Client Sample ID:** DewBurd PSC02

**Report Date:** 10/01/08  
**Collection Date:** 07/18/08 14:25  
**Date Received:** 07/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Silver	ND	mg/L		0.005		1	E200.8	08/05/08 02:01/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/05/08 02:01/eli-c
Uranium	0.0007	mg/L		0.0003		1	E200.8	08/05/08 02:01/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	08/04/08 15:08/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	08/04/08 15:08/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.002	mg/L		0.001		1	E200.8	07/27/08 05:31/eli-c
Uranium	0.0009	mg/L		0.0003		1	E200.8	07/27/08 05:31/eli-c
<b>METALS - TOTAL</b>								
Aluminum	58.7	mg/L		0.1		2	E200.7	07/25/08 21:49/eli-c
Arsenic	0.018	mg/L		0.001		1	E200.8	08/04/08 20:09/eli-c
Barium	0.5	mg/L		0.1		2	E200.7	07/25/08 21:49/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/25/08 21:49/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/04/08 20:09/eli-c
Chromium	0.10	mg/L		0.05		2	E200.7	07/25/08 21:49/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	07/19/08 00:00/mb
Chromium, Trivalent	0.10	mg/L		0.01		1	Calculation	09/25/08 00:00/jmh
Copper	0.06	mg/L		0.01		2	E200.7	07/25/08 21:49/eli-c
Iron	75.7	mg/L		0.03		2	E200.7	07/25/08 21:49/eli-c
Lead	0.040	mg/L		0.001		1	E200.8	08/04/08 20:09/eli-c
Manganese	1.48	mg/L		0.01		2	E200.7	07/25/08 21:49/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/25/08 21:49/eli-c
Nickel	0.09	mg/L		0.05		2	E200.7	07/25/08 21:49/eli-c
Silver	ND	mg/L		0.005		1	E200.8	08/04/08 20:09/eli-c
Thorium 232	0.012	mg/L		0.005		1	E200.8	08/04/08 20:09/eli-c
Uranium	0.0057	mg/L		0.0007		1	E200.8	08/04/08 20:09/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/25/08 21:49/eli-c
Zinc	0.19	mg/L		0.01		2	E200.7	07/25/08 21:49/eli-c
Calcium	516	mg/L		0.5		2	E200.7	07/25/08 21:49/eli-c
Magnesium	97.7	mg/L		0.5		2	E200.7	07/25/08 21:49/eli-c
Potassium	30.1	mg/L		0.5		2	E200.7	07/25/08 21:49/eli-c
Silica	51.9	mg/L		0.5		2	E200.7	07/25/08 21:49/eli-c
Sodium	2	mg/L	D	1		2	E200.7	07/25/08 21:49/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	08/11/08 16:42/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	08/11/08 14:05/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.





LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
 Project: Edgemont  
 Lab ID: R08070340-002  
 Client Sample ID: DewBurd PSC02

Report Date: 10/01/08  
 Collection Date: 07/18/08 14:25  
 Date Received: 07/19/08  
 Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium-VI	ND	mg/L		0.001		1	A3114 B 08/11/08 16:55/eli-c
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1	A3114 B 08/11/08 16:59/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 08/11/08 14:21/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 08/11/08 16:55/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Lead 210	1.7	pCi/L	U			1	E909.0M 08/11/08 10:51/eli-c
Lead 210 precision (±)	4.5	pCi/L				1	E909.0M 08/11/08 10:51/eli-c
Lead 210 MDC	7.4	pCi/L				1	E909.0M 08/11/08 10:51/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008 08/21/08 17:30/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008 08/21/08 17:30/eli-c
Radium 226	-0.04	pCi/L	U			1	E903.0 08/19/08 01:59/eli-c
Radium 226 precision (±)	0.1	pCi/L				1	E903.0 08/19/08 01:59/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0 08/19/08 01:59/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0 08/20/08 17:24/eli-c
Thorium 230 precision (±)	0.05	pCi/L				1	E907.0 08/20/08 17:24/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Lead 210	-0.8	pCi/L	U			1	E909.0M 08/11/08 09:30/eli-c
Lead 210 precision (±)	7.0	pCi/L				1	E909.0M 08/11/08 09:30/eli-c
Lead 210 MDC	11.8	pCi/L				1	E909.0M 08/11/08 09:30/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008 08/08/08 14:06/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1	RMO-3008 08/08/08 14:06/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0 08/11/08 11:25/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0 08/11/08 11:25/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0 08/11/08 11:25/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0 08/10/08 17:23/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0 08/10/08 17:23/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	4.2	pCi/L	U			1	E900.0 09/04/08 18:47/eli-c
Gross Alpha precision (±)	5.7	pCi/L				1	E900.0 09/04/08 18:47/eli-c
Gross Alpha MDC	9.0	pCi/L				1	E900.0 09/04/08 18:47/eli-c
Gross Beta	-7	pCi/L	U			1	E900.0 09/04/08 18:47/eli-c
Gross Beta precision (±)	5.4	pCi/L				1	E900.0 09/04/08 18:47/eli-c
Gross Beta MDC	9.2	pCi/L				1	E900.0 09/04/08 18:47/eli-c
Gross Gamma	0	pCi/L	U	20.0		1	E901.1 08/08/08 07:23/eli-c

Report RL - Analyte reporting limit.  
 Definitions: QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070340-002  
Client Sample ID: DewBurd PSC02

Report Date: 10/01/08  
Collection Date: 07/18/08 14:25  
Date Received: 07/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>RADIONUCLIDES - TOTAL</b>									
Gross Gamma precision (±)	20	pCi/L					1	E901.1	08/08/08 07:23/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	0	pCi/L	U				1	E909.0M	09/24/08 17:25/eli-c
Lead 210 precision (±)	8	pCi/L					1	E909.0M	09/24/08 17:25/eli-c
Lead 210 MDC	14	pCi/L					1	E909.0M	09/24/08 17:25/eli-c
Polonium 210	0.5	pCi/L	U	1.0			1	RMO-3008	09/24/08 17:25/eli-c
Polonium 210 precision (±)	0.59	pCi/L					1	RMO-3008	09/24/08 17:25/eli-c
Radium 226	-0.2	pCi/L	U				1	E903.0	09/24/08 17:25/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	09/24/08 17:25/eli-c
Radium 226 MDC	0.6	pCi/L					1	E903.0	09/24/08 17:25/eli-c
Thorium 230	0.2	pCi/L	U	0.2			1	E907.0	09/24/08 17:25/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	09/24/08 17:25/eli-c
<b>TOTAL METALS ANALYSES</b>									
Mercury	ND	mg/L		0.0002			1	E245.1	07/29/08 12:23/eli-b
<b>DATA QUALITY</b>									
A/C Balance (± 5)	6.31	%					1	A1030 E	09/25/08 00:00/jmh
Anions	20.2	meq/L					1	A1030 E	09/25/08 00:00/jmh
Cations	23.0	meq/L					1	A1030 E	09/25/08 00:00/jmh
Solids, Total Dissolved Calculated	1410	mg/L					1	A1030 E	09/25/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.07						1	A1030 E	09/25/08 00:00/jmh

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

Page 8 of 8



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-002  
Client Sample ID: DewBurd PSC02-1

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	106	mg/L		5		1	A2320 B	07/22/08 10:41/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/22/08 10:41/mb
Bicarbonate as HCO3	129	mg/L		5		1	A2320 B	07/22/08 10:41/mb
Calcium	551	mg/L		0.5		2	E200.7	09/09/08 20:38/eli-c
Chloride	1	mg/L		1		1	E300.0	07/21/08 22:38/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	07/21/08 22:38/jmh
Magnesium	16.8	mg/L		0.5		2	E200.7	09/09/08 20:38/eli-c
Nitrogen, Ammonia as N	0.6	mg/L		0.1		1	A4500-NH3 G	07/30/08 12:10/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	07/21/08 22:38/jmh
Potassium	8	mg/L		1		2	E200.7	09/09/08 20:38/eli-c
Silica	4.8	mg/L		0.5		2	E200.7	09/09/08 20:38/eli-c
Sodium	3	mg/L	D	2		2	E200.7	09/09/08 20:38/eli-c
Sulfate	1220	mg/L	D	3		50	E300.0	07/21/08 21:48/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2000	umhos/cm		5.0		1	A2510 B	07/22/08 10:02/tb
pH	7.21	s.u.		0.01		1	A4500-H B	07/22/08 09:26/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	09/12/08 12:13/ADM
Solids, Suspended Sediment SSC @ 105 C	35800	mg/L		5		1	D3977	07/28/08 10:14/mb
Solids, Total Dissolved TDS @ 180 C	2100	mg/L		5		1	A2540 C	07/23/08 11:47/mb
Solids, Total Suspended TSS @ 105 C	26000	mg/L		5		1	A2540 D	07/21/08 15:08/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		10	E200.8	08/06/08 17:18/eli-c
Arsenic	0.008	mg/L		0.001		1	E200.8	08/05/08 19:48/eli-c
Barium	0.3	mg/L		0.1		1	E200.8	08/05/08 19:48/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/09/08 20:38/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/05/08 19:48/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	08/05/08 19:48/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/05/08 19:48/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	09/09/08 20:38/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/05/08 19:48/eli-c
Manganese	0.80	mg/L		0.01		1	E200.8	08/05/08 19:48/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/05/08 19:48/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	08/05/08 19:48/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	08/05/08 19:48/eli-c
Silver	ND	mg/L		0.005		10	E200.8	08/06/08 17:18/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/05/08 19:48/eli-c
Uranium	0.0016	mg/L		0.0003		1	E200.8	08/05/08 19:48/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-002  
Client Sample ID: DewBurd PSC02-1

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL DF		
<b>METALS - DISSOLVED</b>							
Vanadium	ND	mg/L		0.1	1	E200.8	08/05/08 19:48/eli-c
Zinc	ND	mg/L		0.01	1	E200.8	08/05/08 19:48/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	0.132	mg/L		0.001	10	E200.8	08/14/08 17:05/eli-c
Uranium	0.0435	mg/L		0.0003	5	E200.8	07/29/08 18:39/eli-c
<b>METALS - TOTAL</b>							
Aluminum	324	mg/L		0.1	2	E200.7	08/04/08 18:49/eli-c
Arsenic	0.097	mg/L		0.001	10	E200.8	08/01/08 01:55/eli-c
Barium	1.0	mg/L		0.1	10	E200.8	08/01/08 01:55/eli-c
Boron	0.9	mg/L		0.1	2	E200.7	08/04/08 18:49/eli-c
Cadmium	ND	mg/L		0.005	10	E200.8	08/01/08 01:55/eli-c
Chromium	0.51	mg/L		0.05	10	E200.8	08/01/08 01:55/eli-c
Copper	0.33	mg/L		0.01	10	E200.8	08/01/08 01:55/eli-c
Iron	337	mg/L	D	0.2	2	E200.7	08/04/08 18:49/eli-c
Lead	0.229	mg/L		0.001	10	E200.8	08/01/08 01:55/eli-c
Manganese	10.8	mg/L		0.01	10	E200.8	08/01/08 01:55/eli-c
Molybdenum	ND	mg/L		0.1	10	E200.8	08/01/08 01:55/eli-c
Nickel	0.54	mg/L		0.05	10	E200.8	08/01/08 01:55/eli-c
Silver	ND	mg/L		0.005	10	E200.8	08/01/08 12:37/eli-c
Thorium 232	0.051	mg/L		0.005	10	E200.8	08/01/08 12:37/eli-c
Uranium	0.0311	mg/L		0.0003	10	E200.8	08/01/08 01:55/eli-c
Vanadium	0.7	mg/L	D	0.2	10	E200.8	08/01/08 01:55/eli-c
Zinc	1.17	mg/L		0.01	10	E200.8	08/01/08 01:55/eli-c
Calcium	1710	mg/L	D	0.8	10	E200.7	08/14/08 13:24/eli-c
Magnesium	616	mg/L		0.5	2	E200.7	08/04/08 18:49/eli-c
Potassium	106	mg/L		0.5	2	E200.7	08/04/08 18:49/eli-c
Silica	85.4	mg/L		0.5	2	E200.7	08/04/08 18:49/eli-c
Sodium	5	mg/L	D	1	2	E200.7	08/04/08 18:49/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.005	1	A3114 B	08/15/08 15:30/eli-c
Selenium-IV	ND	mg/L		0.001	1	A3114 B	08/15/08 11:52/eli-c
Selenium-VI	ND	mg/L		0.001	1	A3114 B	08/15/08 15:52/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Radium 226	0.05	pCi/L	U		1	E903.0	08/20/08 09:09/eli-c
Radium 226 precision (±)	0.2	pCi/L			1	E903.0	08/20/08 09:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-002  
Client Sample ID: DewBurd PSC02-1

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226 MDC	0.3	pCi/L				1	E903.0	08/20/08 09:09/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	08/18/08 14:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	08/18/08 14:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	21.3	pCi/L				1	E903.0	08/13/08 12:12/eli-c
Radium 226 precision (±)	1.3	pCi/L				1	E903.0	08/13/08 12:12/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0	08/13/08 12:12/eli-c
Thorium 230	12.6	pCi/L		0.2		1	E907.0	08/06/08 10:30/eli-c
Thorium 230 precision (±)	2.6	pCi/L				1	E907.0	08/06/08 10:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	14.6	pCi/L	U			1	E900.0	08/29/08 13:21/eli-c
Gross Alpha precision (±)	11.4	pCi/L				1	E900.0	08/29/08 13:21/eli-c
Gross Alpha MDC	17.1	pCi/L				1	E900.0	08/29/08 13:21/eli-c
Gross Beta	-9	pCi/L	U			1	E900.0	08/29/08 13:21/eli-c
Gross Beta precision (±)	13.3	pCi/L				1	E900.0	08/29/08 13:21/eli-c
Gross Beta MDC	22.7	pCi/L				1	E900.0	08/29/08 13:21/eli-c
Gross Gamma	0.0	pCi/L		20.0		1	E901.1	08/08/08 07:23/eli-c
Gross Gamma precision (±)	20	pCi/L				1	E901.1	08/08/08 07:23/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	21.3	pCi/L				1	E903.0	09/01/08 12:46/eli-c
Radium 226 precision (±)	1.3	pCi/L				1	E903.0	09/01/08 12:46/eli-c
Thorium 230	12.6	pCi/L		0.2		1	E907.0	09/01/08 12:46/eli-c
Thorium 230 precision (±)	2.6	pCi/L				1	E907.0	09/01/08 12:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0002		1	E245.1	07/29/08 12:30/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.96	%				1	A1030 E	09/12/08 00:00/jmh
Anions	27.6	meq/L				1	A1030 E	09/12/08 00:00/jmh
Cations	29.3	meq/L				1	A1030 E	09/12/08 00:00/jmh
Solids, Total Dissolved Calculated	1880	mg/L				1	A1030 E	09/12/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.10					1	A1030 E	09/12/08 00:00/jmh

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-003  
Client Sample ID: DewBurd PSC02-2

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	94	mg/L		5		1	A2320 B	07/22/08 10:53/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	07/22/08 10:53/mb
Bicarbonate as HCO3	115	mg/L		5		1	A2320 B	07/22/08 10:53/mb
Calcium	564	mg/L		0.5		2	E200.7	09/09/08 20:42/eli-c
Chloride	3	mg/L		1		1	E300.0	07/21/08 23:11/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	07/21/08 23:11/jmh
Magnesium	22.4	mg/L		0.5		2	E200.7	09/09/08 20:42/eli-c
Nitrogen, Ammonia as N	0.4	mg/L		0.1		1	A4500-NH3 G	07/30/08 12:24/jmh
Nitrogen, Nitrate as N	0.3	mg/L		0.1		1	E300.0	07/21/08 23:11/jmh
Potassium	15	mg/L		1		2	E200.7	09/09/08 20:42/eli-c
Silica	4.7	mg/L		0.5		2	E200.7	09/09/08 20:42/eli-c
Sodium	8	mg/L	D	2		2	E200.7	09/09/08 20:42/eli-c
Sulfate	1420	mg/L	D	3		50	E300.0	07/21/08 22:54/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	2220	umhos/cm		5.0		1	A2510 B	07/22/08 10:03/tb
pH	7.16	s.u.		0.01		1	A4500-H B	07/22/08 09:28/tb
Sodium Adsorption Ratio (SAR)	0.10	unitless		0.10		1	Calculation	09/03/08 14:21/ADM
Solids, Suspended Sediment SSC @ 105 C	24800	mg/L		5		1	D3977	07/28/08 10:15/mb
Solids, Total Dissolved TDS @ 180 C	2200	mg/L		5		1	A2540 C	07/23/08 11:47/mb
Solids, Total Suspended TSS @ 105 C	20000	mg/L		5		1	A2540 D	07/21/08 15:09/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		10	E200.8	08/06/08 17:24/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	08/05/08 20:22/eli-c
Barium	0.3	mg/L		0.1		1	E200.8	08/05/08 20:22/eli-c
Boron	ND	mg/L		0.1		2	E200.7	09/09/08 20:42/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	08/05/08 20:22/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	08/05/08 20:22/eli-c
Copper	ND	mg/L		0.01		1	E200.8	08/05/08 20:22/eli-c
Iron	ND	mg/L		0.03		2	E200.7	09/09/08 20:42/eli-c
Lead	ND	mg/L		0.001		1	E200.8	08/05/08 20:22/eli-c
Manganese	0.86	mg/L		0.01		1	E200.8	08/05/08 20:22/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	08/05/08 20:22/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	08/05/08 20:22/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	08/05/08 20:22/eli-c
Silver	ND	mg/L		0.005		10	E200.8	08/06/08 17:24/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	08/05/08 20:22/eli-c
Uranium	0.0172	mg/L		0.0003		1	E200.8	08/05/08 20:22/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08070343-003  
Client Sample ID: DewBurd PSC02-2

Report Date: 09/12/08  
Collection Date: 07/18/08  
Date Received: 07/21/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL DF		
<b>METALS - DISSOLVED</b>							
Vanadium	ND	mg/L		0.1	1	E200.8	08/05/08 20:22/eli-c
Zinc	0.02	mg/L		0.01	1	E200.8	08/05/08 20:22/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	0.056	mg/L		0.001	10	E200.8	08/14/08 17:11/eli-c
Uranium	0.0543	mg/L		0.0003	5	E200.8	07/29/08 18:43/eli-c
<b>METALS - TOTAL</b>							
Aluminum	322	mg/L		0.1	2	E200.7	08/04/08 18:54/eli-c
Arsenic	0.107	mg/L		0.001	10	E200.8	08/01/08 02:29/eli-c
Barium	1.1	mg/L		0.1	10	E200.8	08/01/08 02:29/eli-c
Boron	0.9	mg/L		0.1	2	E200.7	08/04/08 18:54/eli-c
Cadmium	ND	mg/L		0.005	10	E200.8	08/01/08 02:29/eli-c
Chromium	0.52	mg/L		0.05	10	E200.8	08/01/08 02:29/eli-c
Copper	0.32	mg/L		0.01	10	E200.8	08/01/08 02:29/eli-c
Iron	356	mg/L	D	0.2	2	E200.7	08/04/08 18:54/eli-c
Lead	0.240	mg/L		0.001	10	E200.8	08/01/08 02:29/eli-c
Manganese	11.4	mg/L		0.01	10	E200.8	08/01/08 02:29/eli-c
Molybdenum	ND	mg/L		0.1	10	E200.8	08/01/08 02:29/eli-c
Nickel	0.51	mg/L		0.05	10	E200.8	08/01/08 02:29/eli-c
Silver	ND	mg/L		0.005	10	E200.8	08/01/08 14:16/eli-c
Thorium 232	0.054	mg/L		0.005	10	E200.8	08/11/08 15:44/eli-c
Uranium	0.0888	mg/L		0.0003	10	E200.8	08/01/08 02:29/eli-c
Vanadium	0.8	mg/L	D	0.2	10	E200.8	08/01/08 02:29/eli-c
Zinc	1.22	mg/L		0.01	10	E200.8	08/01/08 02:29/eli-c
Calcium	1780	mg/L	D	0.8	10	E200.7	08/14/08 13:32/eli-c
Magnesium	607	mg/L		0.5	2	E200.7	08/04/08 18:54/eli-c
Potassium	115	mg/L		0.5	2	E200.7	08/04/08 18:54/eli-c
Silica	84.9	mg/L		0.5	2	E200.7	08/04/08 18:54/eli-c
Sodium	10	mg/L	D	1	2	E200.7	08/04/08 18:54/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.005	1	A3114 B	08/15/08 15:33/eli-c
Selenium-IV	ND	mg/L		0.001	1	A3114 B	08/15/08 11:54/eli-c
Selenium-VI	ND	mg/L		0.001	1	A3114 B	08/15/08 15:52/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Radium 226	0.6	pCi/L			1	E903.0	08/20/08 09:09/eli-c
Radium 226 precision (±)	0.3	pCi/L			1	E903.0	08/20/08 09:09/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08070343-003  
**Client Sample ID:** DewBurd PSC02-2

**Report Date:** 09/12/08  
**Collection Date:** 07/18/08  
**Date Received:** 07/21/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226 MDC	0.3	pCi/L					1 E903.0	08/20/08 09:09/eli-c
Thorium 230	0.1	pCi/L	U	0.2			1 E907.0	08/18/08 14:00/eli-c
Thorium 230 precision (±)	0.1	pCi/L					1 E907.0	08/18/08 14:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	24.8	pCi/L					1 E903.0	08/13/08 13:55/eli-c
Radium 226 precision (±)	1.3	pCi/L					1 E903.0	08/13/08 13:55/eli-c
Radium 226 MDC	0.4	pCi/L					1 E903.0	08/13/08 13:55/eli-c
Thorium 230	20.0	pCi/L		0.2			1 E907.0	08/06/08 10:30/eli-c
Thorium 230 precision (±)	3.6	pCi/L					1 E907.0	08/06/08 10:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	33.3	pCi/L					1 E900.0	08/29/08 13:21/eli-c
Gross Alpha precision (±)	16.1	pCi/L					1 E900.0	08/29/08 13:21/eli-c
Gross Alpha MDC	22.2	pCi/L					1 E900.0	08/29/08 13:21/eli-c
Gross Beta	-5	pCi/L	U				1 E900.0	08/29/08 13:21/eli-c
Gross Beta precision (±)	16.2	pCi/L					1 E900.0	08/29/08 13:21/eli-c
Gross Beta MDC	27.3	pCi/L					1 E900.0	08/29/08 13:21/eli-c
Gross Gamma	0.0	pCi/L		20.0			1 E901.1	08/08/08 07:23/eli-c
Gross Gamma precision (±)	20	pCi/L					1 E901.1	08/08/08 07:23/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	25.4	pCi/L					1 E903.0	09/01/08 12:46/eli-c
Radium 226 precision (±)	1.4	pCi/L					1 E903.0	09/01/08 12:46/eli-c
Thorium 230	20.1	pCi/L		0.2			1 E907.0	09/01/08 12:46/eli-c
Thorium 230 precision (±)	3.6	pCi/L					1 E907.0	09/01/08 12:46/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0002			1 E245.1	07/29/08 12:32/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-4.26	%					1 A1030 E	09/05/08 00:00/jmh
Anions	31.5	meq/L					1 A1030 E	09/05/08 00:00/jmh
Cations	28.9	meq/L					1 A1030 E	09/05/08 00:00/jmh
Solids, Total Dissolved Calculated	2060	mg/L					1 A1030 E	09/05/08 00:00/jmh
TDS Balance (0.80 - 1.20)	1.08						1 A1030 E	09/05/08 00:00/jmh

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030252-003  
Client Sample ID: DewBurd SUB01

Report Date: 06/24/08  
Collection Date: 03/24/08 12:45  
Date Received: 03/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	44	CFU/100ml	D	4		4	A9222 D	03/25/08 11:10/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	38	mg/L		5		1	A2320 B	03/28/08 13:25/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	03/28/08 13:25/sn
Bicarbonate as HCO3	46	mg/L		5		1	A2320 B	03/28/08 13:25/sn
Calcium	21.0	mg/L		0.5		2	E200.7	04/10/08 13:04/eli-c
Chloride	3	mg/L		1		1	E300.0	03/26/08 13:50/jmh
Fluoride	0.3	mg/L		0.1		1	E300.0	03/26/08 13:50/jmh
Magnesium	4.4	mg/L		0.5		2	E200.7	04/10/08 13:04/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	03/28/08 14:11/jmh
Nitrogen, Nitrate as N	1.2	mg/L		0.1		1	E300.0	03/26/08 13:50/jmh
Potassium	4	mg/L		1		2	E200.7	04/10/08 13:04/eli-c
Silica	8.6	mg/L		0.5		2	E200.7	04/10/08 13:04/eli-c
Sodium	18.9	mg/L		0.5		2	E200.7	04/10/08 13:04/eli-c
Sulfate	59	mg/L		1		1	E300.0	03/26/08 13:50/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	230	umhos/cm		5.0		1	A2510 B	03/26/08 11:13/jmh
pH	7.73	s.u.		0.01		1	A4500-H B	03/26/08 15:38/jmh
Sodium Adsorption Ratio (SAR)	0.98	unitless		0.10		1	Calculation	05/13/08 15:28/ADM
Solids, Suspended Sediment SSC @ 105 C	198	mg/L		5		1	D3977	03/25/08 10:41/jmh
Solids, Total Dissolved TDS @ 180 C	300	mg/L		5		1	A2540 C	06/17/08 09:48/mb
Solids, Total Suspended TSS @ 105 C	100	mg/L		5		1	A2540 D	03/28/08 08:06/mb
<b>METALS - DISSOLVED</b>								
Aluminum	0.2	mg/L		0.1		2	E200.7	04/10/08 13:04/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	04/13/08 12:33/eli-c
Barium	ND	mg/L		0.1		1	E200.8	04/13/08 12:33/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/10/08 13:04/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/13/08 12:33/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	04/10/08 13:04/eli-c
Copper	ND	mg/L		0.01		1	E200.8	04/13/08 12:33/eli-c
Iron	0.15	mg/L		0.03		2	E200.7	04/10/08 13:04/eli-c
Lead	ND	mg/L		0.001		1	E200.8	04/13/08 12:33/eli-c
Manganese	0.02	mg/L		0.01		2	E200.7	04/10/08 13:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	04/13/08 12:33/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/10/08 13:04/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

Page 9 of 20



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030252-003  
Client Sample ID: DewBurd SUB01

Report Date: 06/24/08  
Collection Date: 03/24/08 12:45  
Date Received: 03/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	04/13/08 12:33/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/13/08 12:33/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/13/08 12:33/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	04/13/08 12:33/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/10/08 13:04/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	04/10/08 13:04/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.002	mg/L		0.001		1	E200.8	04/13/08 13:54/eli-c
Uranium	0.0006	mg/L		0.0003		1	E200.8	04/13/08 13:54/eli-c
<b>METALS - TOTAL</b>								
Aluminum	22.4	mg/L		0.1		2	E200.7	04/09/08 16:20/eli-c
Arsenic	0.005	mg/L		0.001		1	E200.8	04/10/08 19:20/eli-c
Barium	0.1	mg/L		0.1		2	E200.7	04/09/08 16:20/eli-c
Boron	ND	mg/L		0.1		2	E200.7	04/09/08 16:20/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	04/10/08 19:20/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	04/09/08 16:20/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.01		2	A3500-Cr B	03/21/08 12:07/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	06/16/08 00:00/ADM
Copper	0.02	mg/L		0.01		1	E200.8	04/10/08 19:20/eli-c
Iron	15.1	mg/L		0.03		2	E200.7	04/09/08 16:20/eli-c
Lead	0.009	mg/L		0.001		1	E200.8	04/10/08 19:20/eli-c
Manganese	0.18	mg/L		0.01		2	E200.7	04/09/08 16:20/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	04/09/08 16:20/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	04/10/08 19:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	04/10/08 19:20/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	04/10/08 19:20/eli-c
Uranium	0.0011	mg/L		0.0003		1	E200.8	04/10/08 19:20/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	04/09/08 16:20/eli-c
Zinc	0.06	mg/L		0.01		1	E200.8	04/10/08 19:20/eli-c
Calcium	25.1	mg/L		0.5		2	E200.7	04/09/08 16:20/eli-c
Magnesium	8.4	mg/L		0.5		2	E200.7	04/09/08 16:20/eli-c
Potassium	8.3	mg/L		0.5		2	E200.7	04/09/08 16:20/eli-c
Silica	104	mg/L		0.5		2	E200.7	04/09/08 16:20/eli-c
Sodium	17.8	mg/L		0.5		2	E200.7	04/09/08 16:20/eli-c

METALS - DISSOLVED - SPECIATED

<b>Report</b>	RL - Analyte reporting limit.	MCL - Maximum contaminant level.	Page 10 of 20
<b>Definitions:</b>	QCL - Quality control limit.	ND - Not detected at the reporting limit.	
	MDC - Minimum detectable concentration	D - RL increased due to sample matrix interference.	



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08030252-003  
Client Sample ID: DewBurd SUB01

Report Date: 06/24/08  
Collection Date: 03/24/08 12:45  
Date Received: 03/25/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium	ND	mg/L		0.001			1	A3114 B	04/01/08 13:32/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	04/01/08 09:33/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	04/01/08 14:49/eli-c
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	0.001	mg/L		0.001			1	A3114 B	04/01/08 13:47/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	04/01/08 09:48/eli-c
Selenium-VI	0.001	mg/L		0.001			1	A3114 B	04/01/08 14:49/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Radium 226	0.2	pCi/L					1	E903.0	04/19/08 20:42/eli-c
Radium 226 precision (±)	0.2	pCi/L					1	E903.0	04/19/08 20:42/eli-c
Radium 226 MDC	0.2	pCi/L					1	E903.0	04/19/08 20:42/eli-c
Thorium 230	0.2	pCi/L		0.2			1	E907.0	03/31/08 14:00/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	03/31/08 14:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Radium 226	1	pCi/L					1	E903.0	04/13/08 10:30/eli-c
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	04/13/08 10:30/eli-c
Radium 226 MDC	0.6	pCi/L					1	E903.0	04/13/08 10:30/eli-c
Thorium 230	0.2	pCi/L	U	0.2			1	E907.0	04/02/08 15:30/eli-c
Thorium 230 precision (±)	0.3	pCi/L					1	E907.0	04/02/08 15:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	2.4	pCi/L					1	E900.0	04/09/08 12:08/eli-c
Gross Alpha precision (±)	0.9	pCi/L					1	E900.0	04/09/08 12:08/eli-c
Gross Alpha MDC	1.1	pCi/L					1	E900.0	04/09/08 12:08/eli-c
Gross Beta	5.1	pCi/L					1	E900.0	04/09/08 12:08/eli-c
Gross Beta precision (±)	1.5	pCi/L					1	E900.0	04/09/08 12:08/eli-c
Gross Beta MDC	2.4	pCi/L					1	E900.0	04/09/08 12:08/eli-c
Gross Gamma	ND	pCi/L		20.0			1	E901.1	04/04/08 16:45/eli-c
Gross Gamma precision (±)	ND	pCi/L					1	E901.1	04/04/08 16:45/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Radium 226	1.2	pCi/L					1	E903.0	04/20/08 17:48/eli-c
Radium 226 precision (±)	0.6	pCi/L					1	E903.0	04/20/08 17:48/eli-c
Thorium 230	0.4	pCi/L		0.2			1	E907.0	04/20/08 17:48/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	04/20/08 17:48/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

### LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08030252-003  
**Client Sample ID:** DewBurd SUB01

**Report Date:** 06/24/08  
**Collection Date:** 03/24/08 12:45  
**Date Received:** 03/25/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	04/10/08 14:04/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	4.36					1	A1030 E	06/18/08 00:00/ADM
Anions	2.17	meq/L				1	A1030 E	06/18/08 00:00/ADM
Cations	2.37	meq/L				1	A1030 E	06/18/08 00:00/ADM
Solids, Total Dissolved Calculated	162	mg/L				1	A1030 E	06/18/08 00:00/ADM
TDS Balance (0.80 - 1.20)	1.86					1	A1030 E	06/18/08 00:00/ADM

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 12 of 20



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
 Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060347-001  
**Client Sample ID:** DewBurd SUB01

**Report Date:** 08/21/08  
**Collection Date:** 06/18/08 12:00  
**Date Received:** 06/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	20	CFU/100ml	D	20		20	A9222 D	06/19/08 11:58/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	84	mg/L		5		1	A2320 B	06/25/08 11:12/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 11:12/mb
Bicarbonate as HCO3	102	mg/L		5		1	A2320 B	06/25/08 11:12/mb
Calcium	21.1	mg/L		0.5		2	E200.7	07/10/08 16:27/eli-c
Chloride	5	mg/L		1		5	E300.0	06/20/08 01:33/jmh
Fluoride	0.6	mg/L		0.1		5	E300.0	06/20/08 01:33/jmh
Magnesium	4.4	mg/L		0.5		2	E200.7	07/10/08 16:27/eli-c
Nitrogen, Ammonia as N	1.2	mg/L		0.1		2	A4500-NH3 G	06/19/08 12:44/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		5	E300.0	06/20/08 01:33/jmh
Potassium	8	mg/L		1		2	E200.7	07/10/08 16:27/eli-c
Silica	7.9	mg/L		0.5		2	E200.7	07/10/08 16:27/eli-c
Sodium	20	mg/L	D	2		2	E200.7	07/10/08 16:27/eli-c
Sulfate	33	mg/L		1		5	E300.0	06/20/08 01:33/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	250	umhos/cm		5.0		1	A2510 B	06/23/08 10:48/tb
pH	7.07	s.u.		0.01		1	A4500-H B	06/19/08 12:19/tb
Sodium Adsorption Ratio (SAR)	1.0	unitless		0.10		1	Calculation	08/20/08 15:29/ADM
Solids, Suspended Sediment SSC @ 105 C	393	mg/L		5		1	D3977	06/30/08 15:47/mb
Solids, Total Dissolved TDS @ 180 C	990	mg/L		5		1	A2540 C	06/20/08 08:27/mb
Solids, Total Suspended TSS @ 105 C	280	mg/L		5		1	A2540 D	06/19/08 15:38/mb
TDS result confirmed. Very fine suspended sediment.								
<b>METALS - DISSOLVED</b>								
Aluminum	0.3	mg/L		0.1		2	E200.7	07/10/08 16:27/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	07/23/08 12:47/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/10/08 16:27/eli-c
Boron	0.1	mg/L		0.1		2	E200.7	07/10/08 16:27/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/23/08 12:47/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	07/10/08 16:27/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 12:47/eli-c
Iron	0.31	mg/L		0.03		2	E200.7	07/10/08 16:27/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 12:47/eli-c
Manganese	0.24	mg/L		0.01		2	E200.7	07/10/08 16:27/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 12:47/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/10/08 16:27/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-001  
Client Sample ID: DewBurd SUB01

Report Date: 08/21/08  
Collection Date: 06/18/08 12:00  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		2	E200.7	07/10/08 16:27/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/23/08 12:47/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 12:47/eli-c
Uranium	0.0003	mg/L		0.0003		1	E200.8	07/23/08 12:47/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/23/08 12:47/eli-c
Zinc	0.01	mg/L		0.01		2	E200.7	07/10/08 16:27/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	0.004	mg/L		0.001		1	E200.8	07/28/08 21:58/eli-c
Uranium	0.0007	mg/L		0.0003		1	E200.8	07/28/08 21:58/eli-c
<b>METALS - TOTAL</b>								
Aluminum	52.8	mg/L		0.1		2	E200.7	07/07/08 22:41/eli-c
Arsenic	0.014	mg/L		0.001		1	E200.8	07/18/08 13:19/eli-c
Barium	0.2	mg/L		0.1		2	E200.7	07/07/08 22:41/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/07/08 22:41/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/18/08 13:19/eli-c
Chromium	0.06	mg/L		0.05		2	E200.7	07/07/08 22:41/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.05		10	A3500-Cr B	06/19/08 00:00/mb
Chromium, Trivalent	0.06	mg/L		0.01		1	Calculation	08/20/08 00:00/kl
Copper	0.03	mg/L		0.01		2	E200.7	07/07/08 22:41/eli-c
Iron	44.1	mg/L		0.03		2	E200.7	07/07/08 22:41/eli-c
Lead	0.026	mg/L		0.001		1	E200.8	07/18/08 13:19/eli-c
Manganese	0.77	mg/L		0.01		2	E200.7	07/07/08 22:41/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 22:41/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 22:41/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/18/08 13:19/eli-c
Thorium 232	0.012	mg/L		0.005		1	E200.8	07/18/08 13:19/eli-c
Uranium	0.0020	mg/L		0.0003		1	E200.8	07/18/08 13:19/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/07/08 22:41/eli-c
Zinc	0.13	mg/L		0.01		2	E200.7	07/07/08 22:41/eli-c
Calcium	30.2	mg/L		0.5		2	E200.7	07/07/08 22:41/eli-c
Magnesium	15.1	mg/L		0.5		2	E200.7	07/07/08 22:41/eli-c
Potassium	20.9	mg/L		0.5		2	E200.7	07/07/08 22:41/eli-c
Silica	88.1	mg/L		0.5		2	E200.7	07/07/08 22:41/eli-c
Sodium	21	mg/L	D	1		2	E200.7	07/07/08 22:41/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	07/19/08 14:43/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-001  
Client Sample ID: DewBurd SUB01

Report Date: 08/21/08  
Collection Date: 06/18/08 12:00  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium-IV	ND	mg/L		0.001		1	A3114 B 07/19/08 11:44/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	ND	mg/L		0.001		1	A3114 B 07/22/08 14:57/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 07/22/08 11:15/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B 07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Lead 210	0.7	pCi/L	U			1	E909.0M 07/18/08 08:20/eli-c
Lead 210 MDC	8.4	pCi/L				1	E909.0M 07/18/08 08:20/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M 07/18/08 08:20/eli-c
Polonium 210	0.1	pCi/L	U	1.0		1	RMO-3008 07/09/08 18:40/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008 07/09/08 18:40/eli-c
Radium 226	0.5	pCi/L				1	E903.0 07/21/08 20:20/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0 07/21/08 20:20/eli-c
Radium 226 MDC	0.2	pCi/L				1	E903.0 07/21/08 20:20/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0 07/18/08 20:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0 07/18/08 20:05/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Lead 210	-2.1	pCi/L	U			1	E909.0M 07/15/08 07:15/eli-c
Lead 210 precision (±)	8.6	pCi/L				1	E909.0M 07/15/08 07:15/eli-c
Lead 210 MDC	14.6	pCi/L				1	E909.0M 07/15/08 07:15/eli-c
Polonium 210	1.3	pCi/L		1.0		1	RMO-3008 08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.78	pCi/L				1	RMO-3008 08/18/08 17:00/eli-c
Radium 226	-0.2	pCi/L	U			1	E903.0 07/16/08 13:32/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0 07/16/08 13:32/eli-c
Radium 226 MDC	0.4	pCi/L				1	E903.0 07/16/08 13:32/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0 07/10/08 13:48/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0 07/10/08 13:48/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	16.2	pCi/L				1	E900.0 07/26/08 03:40/eli-c
Gross Alpha precision (±)	2.0	pCi/L				1	E900.0 07/26/08 03:40/eli-c
Gross Alpha MDC	1.7	pCi/L				1	E900.0 07/26/08 03:40/eli-c
Gross Beta	20.2	pCi/L				1	E900.0 07/26/08 03:40/eli-c
Gross Beta precision (±)	2.0	pCi/L				1	E900.0 07/26/08 03:40/eli-c
Gross Beta MDC	2.7	pCi/L				1	E900.0 07/26/08 03:40/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060347-001  
**Client Sample ID:** DewBurd SUB01

**Report Date:** 08/21/08  
**Collection Date:** 06/18/08 12:00  
**Date Received:** 06/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
<b>RADIONUCLIDES - TOTAL</b>								
Gross Gamma	0.0	pCi/L	U	20.0			E901.1	06/26/08 18:46/eli-c
Gross Gamma precision (±)	20	pCi/L					E901.1	06/26/08 18:46/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Lead 210	-1.4	pCi/L	U				E909.0M	08/20/08 12:33/eli-c
Lead 210 precision (±)	10	pCi/L					E909.0M	08/20/08 12:33/eli-c
Polonium 210	1.4	pCi/L		1.0			RMO-3008	08/20/08 12:33/eli-c
Polonium 210 precision (±)	0.88	pCi/L					RMO-3008	08/20/08 12:33/eli-c
Radium 226	0.3	pCi/L	U				E903.0	08/20/08 12:33/eli-c
Radium 226 precision (±)	0.3	pCi/L					E903.0	08/20/08 12:33/eli-c
Thorium 230	0.4	pCi/L		0.2			E907.0	08/20/08 12:33/eli-c
Thorium 230 precision (±)	0.3	pCi/L					E907.0	08/20/08 12:33/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.001			E245.1	07/02/08 09:55/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	1.86	%					A1030 E	08/20/08 00:00/ikl
Anions	2.54	meq/L					A1030 E	08/20/08 00:00/ikl
Cations	2.63	meq/L					A1030 E	08/20/08 00:00/ikl
Solids, Total Dissolved Calculated	164	mg/L					A1030 E	08/20/08 00:00/ikl
TDS Balance (0.80 - 1.20)	6.05						A1030 E	08/20/08 00:00/ikl

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090389-002  
Client Sample ID: DewBurd SUB02

Report Date: 12/26/07  
Collection Date: 09/27/07 18:45  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	2	CFU/100ml	D	2		2	A9222 D	09/28/07 17:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	92	mg/L		5		1	A2320 B	10/04/07 17:23/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:23/sn
Bicarbonate as HCO3	112	mg/L		5		1	A2320 B	10/04/07 17:23/sn
Calcium	622	mg/L		1		10	E200.7	10/09/07 20:20/eli-c
Chloride	23	mg/L		1		5	E300.0	10/02/07 05:58/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	09/29/07 01:50/jmh
Magnesium	212	mg/L		1		10	E200.7	10/09/07 20:20/eli-c
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	09/29/07 01:50/jmh
Potassium	21	mg/L		1		1	E200.7	10/09/07 20:17/eli-c
Silica	2	mg/L		1		1	E200.7	10/09/07 20:17/eli-c
Sodium	163	mg/L		1		1	E200.7	10/09/07 20:17/eli-c
Sulfate	2840	mg/L	D	40		50	E300.0	10/02/07 05:42/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3700	umhos/cm		5		1	A2510 B	10/02/07 18:50/jmh
pH	7.99	s.u.		0.01		1	A4500-H B	10/02/07 18:51/jmh
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	10/05/07 08:40/jmh
Solids, Total Dissolved TDS @ 180 C	3900	mg/L		5		1	A2540 C	10/02/07 13:05/sn
Solids, Total Suspended TSS @ 105 C	ND	mg/L		5		1	A2540 D	10/04/07 08:30/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	10/04/07 19:01/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	10/04/07 19:01/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/04/07 19:01/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	10/09/07 20:17/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	10/04/07 19:01/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	10/04/07 19:01/eli-c
Copper	ND	mg/L		0.01		1	E200.8	10/04/07 19:01/eli-c
Iron	ND	mg/L		0.03		1	E200.7	10/09/07 20:17/eli-c
Lead	ND	mg/L		0.001		1	E200.8	10/04/07 19:01/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	10/04/07 19:01/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 19:01/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/04/07 19:01/eli-c
Nickel	ND	mg/L		0.01		1	E200.8	10/04/07 19:01/eli-c
Selenium	0.006	mg/L		0.001		1	E200.8	10/04/07 19:01/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 4 of 12



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090389-002  
Client Sample ID: DewBurd SUB02

Report Date: 12/26/07  
Collection Date: 09/27/07 18:45  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL DF		
<b>METALS - DISSOLVED</b>							
Silver	ND	mg/L		0.005	1	E200.8	10/04/07 19:01/eli-c
Thorium 232	ND	mg/L		0.005	1	E200.8	10/04/07 19:01/eli-c
Uranium	0.164	mg/L		0.0003	1	E200.8	10/04/07 19:01/eli-c
Vanadium	ND	mg/L		0.1	1	E200.8	10/04/07 19:01/eli-c
Zinc	ND	mg/L		0.01	1	E200.8	10/04/07 19:01/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001	10	E200.8	10/09/07 03:25/eli-c
Uranium	ND	mg/L		0.0003	10	E200.8	10/09/07 03:25/eli-c
<b>METALS - TOTAL</b>							
Aluminum	ND	mg/L		0.1	1	E200.8	10/08/07 23:31/eli-c
Arsenic	ND	mg/L		0.001	1	E200.8	10/08/07 23:31/eli-c
Barium	ND	mg/L		0.1	1	E200.8	10/08/07 23:31/eli-c
Boron	0.5	mg/L		0.1	1	E200.7	10/08/07 16:23/eli-c
Cadmium	ND	mg/L		0.005	1	E200.8	10/08/07 23:31/eli-c
Chromium	ND	mg/L		0.05	1	E200.8	10/08/07 23:31/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.05	10	A3500-Cr B	09/28/07 09:00/sn
Chromium, Trivalent	ND	mg/L		0.01	1	Calculation	12/10/07 16:40/eli-c
Copper	ND	mg/L		0.01	1	E200.8	10/08/07 23:31/eli-c
Iron	0.14	mg/L		0.03	1	E200.7	10/08/07 16:23/eli-c
Lead	ND	mg/L		0.001	1	E200.8	10/08/07 23:31/eli-c
Manganese	0.02	mg/L		0.01	1	E200.8	10/08/07 23:31/eli-c
Mercury	ND	mg/L		0.001	1	E200.8	10/08/07 23:31/eli-c
Molybdenum	ND	mg/L		0.1	1	E200.8	10/08/07 23:31/eli-c
Nickel	ND	mg/L		0.05	1	E200.8	10/08/07 23:31/eli-c
Silver	ND	mg/L		0.005	1	E200.8	10/08/07 23:31/eli-c
Thorium 232	ND	mg/L		0.005	1	E200.8	10/08/07 23:31/eli-c
Uranium	0.168	mg/L		0.0003	1	E200.8	10/08/07 23:31/eli-c
Vanadium	ND	mg/L		0.1	1	E200.8	10/08/07 23:31/eli-c
Zinc	ND	mg/L		0.01	1	E200.7	10/08/07 16:23/eli-c
- D=Detection limit raised due to matrix interference.							
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	0.001	mg/L		0.001	1	A3114 B	10/08/07 15:48/eli-c
Selenium-IV	ND	mg/L		0.001	1	A3114 B	10/10/07 10:27/eli-c
Selenium-VI	0.001	mg/L		0.001	1	A3114 B	10/11/07 11:00/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07090389-002  
**Client Sample ID:** DewBurd SUB02

**Report Date:** 12/26/07  
**Collection Date:** 09/27/07 18:45  
**Date Received:** 09/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	0.6	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	10/30/07 13:35/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/24/07 07:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/30/07 13:34/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/26/07 10:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	82.8	pCi/L		1.0		1	E900.0	10/14/07 01:13/eli-c
Gross Alpha precision (±)	4.5	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Beta	55.9	pCi/L		2.0		1	E900.0	10/14/07 01:13/eli-c
Gross Beta precision (±)	7.6	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	10/04/07 15:30/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-4.01	%				1	A1030 E	12/10/07 18:58/eli-c
Anions	61.6	meq/L				1	A1030 E	12/10/07 18:58/eli-c
Cations	56.8	meq/L				1	A1030 E	12/10/07 18:58/eli-c
Solids, Total Dissolved Calculated	3950	mg/L				1	A1030 E	12/10/07 18:58/eli-c
TDS Balance (0.80 - 1.20)	0.990	dec. %				1	A1030 E	12/10/07 18:58/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 6 of 12



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-001  
Client Sample ID: DewBurdSub02

Report Date: 01/29/08  
Collection Date: 11/12/07 12:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	11/13/07 12:50/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	102	mg/L		5		1	A2320 B	11/26/07 16:19/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:19/sn
Bicarbonate as HCO3	124	mg/L		5		1	A2320 B	11/26/07 16:19/sn
Calcium	561	mg/L	D	1		10	E200.7	11/27/07 18:48/eli-c
Chloride	22	mg/L		1		5	E300.0	11/17/07 01:33/jmh
Fluoride	0.5	mg/L		0.1		1	E300.0	11/15/07 03:26/jmh
Magnesium	180	mg/L		0.5		1	E200.7	11/27/07 19:44/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:48/jmh
Nitrogen, Nitrate as N	0.1	mg/L		0.1		1	E300.0	11/15/07 03:26/jmh
Potassium	21	mg/L		1		1	E200.7	11/27/07 19:44/eli-c
Silica	2.4	mg/L		0.5		1	E200.7	11/27/07 19:44/eli-c
Sodium	165	mg/L	D	0.8		1	E200.7	11/27/07 19:44/eli-c
Sulfate	2390	mg/L	D	40		50	E300.0	11/15/07 02:38/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3340	umhos/cm		5.0		1	A2510 B	11/16/07 18:22/jmh
pH	7.78	s.u.		0.01		1	A4500-H B	11/16/07 14:24/jmh
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	12/16/07 16:13/eli-c
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	11/14/07 17:18/jmh
Solids, Total Dissolved TDS @ 180 C	3900	mg/L		5		1	A2540 C	11/15/07 16:10/jmh
Solids, Total Suspended TSS @ 105 C	ND	mg/L		5		1	A2540 D	11/19/07 13:44/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		10	E200.8	11/21/07 23:59/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/20/07 01:08/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/20/07 01:08/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	11/27/07 19:44/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/20/07 01:08/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	11/20/07 01:08/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/20/07 01:08/eli-c
Iron	0.08	mg/L		0.03		1	E200.7	11/27/07 19:44/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/20/07 01:08/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	11/20/07 01:08/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 01:08/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/20/07 01:08/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 1 of 16

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-001  
Client Sample ID: DewBurdSub02

Report Date: 01/29/08  
Collection Date: 11/12/07 12:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.01		1	E200.8	11/20/07 01:08/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 12:14/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/20/07 01:08/eli-c
Uranium	0.171	mg/L		0.0003		1	E200.8	11/20/07 01:08/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/20/07 01:08/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/20/07 01:08/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	11/21/07 04:22/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	11/21/07 04:22/eli-c
<b>METALS - TOTAL</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	11/20/07 22:09/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/20/07 22:09/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/20/07 22:09/eli-c
Boron	0.4	mg/L		0.1		1	E200.7	11/27/07 19:31/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/20/07 22:09/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	11/20/07 22:09/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	11/12/07 00:00/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/16/07 16:26/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/20/07 22:09/eli-c
Iron	0.23	mg/L		0.03		1	E200.7	11/27/07 19:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/20/07 22:09/eli-c
Manganese	0.02	mg/L		0.01		1	E200.8	11/20/07 22:09/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 22:09/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/20/07 22:09/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	11/20/07 22:09/eli-c
Silver	ND	mg/L		0.005		1	E200.8	11/20/07 22:09/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/20/07 22:09/eli-c
Uranium	0.162	mg/L		0.0003		1	E200.8	11/20/07 22:09/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/20/07 22:09/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	11/20/07 22:09/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	11/28/07 14:02/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/28/07 09:34/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	11/28/07 15:15/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07110147-001  
**Client Sample ID:** DewBurdSub02

**Report Date:** 01/29/08  
**Collection Date:** 11/12/07 12:50  
**Date Received:** 11/13/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/			Method	Analysis Date / By
				RL	QCL	DF		
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.002	mg/L		0.001		1	A3114 B	11/28/07 14:11/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/28/07 09:42/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	11/28/07 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	1.8	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.4	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	0.6	pCi/L		0.2		1	E903.0	11/26/07 23:57/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/26/07 23:57/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/28/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 19:59/eli-c
Thorium 230	0.7	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	11/26/07 14:10/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	132	pCi/L		1.0		1	E900.0	12/04/07 04:33/eli-c
Gross Alpha precision (±)	5.0	pCi/L				1	E900.0	12/04/07 04:33/eli-c
Gross Beta	83.3	pCi/L		2.0		1	E900.0	12/04/07 04:33/eli-c
Gross Beta precision (±)	8.1	pCi/L				1	E900.0	12/04/07 04:33/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	1.5	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.3	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	0.6	pCi/L		0.2		1	E903.0	11/26/07 12:39/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	11/26/07 12:39/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/28/07 15:00/eli-c
Gross Gamma	1060	pCi/L		20.0		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	462	pCi/L				1	E901.1	11/16/07 10:50/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-1.86	%				1	A1030 E	12/16/07 16:28/eli-c
Anions	52.4	meq/L				1	A1030 E	12/16/07 16:28/eli-c
Cations	50.5	meq/L				1	A1030 E	12/16/07 16:28/eli-c
Solids, Total Dissolved Calculated	3400	mg/L				1	A1030 E	12/16/07 16:28/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-001  
Client Sample ID: DewBurdSub02

Report Date: 01/29/08  
Collection Date: 11/12/07 12:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>DATA QUALITY</b>									
TDS Balance (0.80 - 1.20)	1.15	dec. %					1	A1030 E	12/16/07 16:28/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 4 of 16



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020083-003  
Client Sample ID: DewBurd Sub02

Report Date: 04/30/08  
Collection Date: 02/10/08 17:00  
Date Received: 02/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	02/11/08 13:40/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	90	mg/L		5		1	A2320 B	02/21/08 16:36/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/21/08 16:36/sn
Bicarbonate as HCO3	110	mg/L		5		1	A2320 B	02/21/08 16:36/sn
Calcium	538	mg/L	D	1		10	E200.7	02/27/08 19:23/eli-c
Chloride	24	mg/L		1		5	E300.0	02/14/08 18:00/sn
Fluoride	0.5	mg/L		0.1		1	E300.0	02/12/08 20:54/sn
Magnesium	198	mg/L		0.5		1	E200.7	02/27/08 21:21/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	02/11/08 18:17/sn
Nitrogen, Nitrate as N	0.2	mg/L		0.1		1	E300.0	02/12/08 20:54/sn
Potassium	23	mg/L		1		1	E200.7	02/27/08 21:21/eli-c
Silica	2.8	mg/L		0.5		1	E200.7	02/27/08 21:21/eli-c
Sodium	169	mg/L	D	0.8		1	E200.7	02/27/08 21:21/eli-c
Sulfate	2500	mg/L	D	7		100	E300.0	02/14/08 17:45/sn
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3800	umhos/cm		5.0		1	A2510 B	02/16/08 15:28/jmh
pH	7.81	s.u.		0.01		1	A4500-H B	02/16/08 15:02/jmh
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	04/15/08 00:00/lkl
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	02/20/08 16:29/jmh
Solids, Total Dissolved TDS @ 180 C	2900	mg/L		5		1	A2540 C	02/11/08 15:00/jmh
Solids, Total Suspended TSS @ 105 C	10	mg/L		5		1	A2540 D	02/15/08 11:02/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	02/21/08 22:20/eli-c
Arsenic	0.001	mg/L		0.001		1	E200.8	02/21/08 22:20/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 22:20/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	02/27/08 21:21/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 22:20/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 22:20/eli-c
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 22:20/eli-c
Iron	0.07	mg/L		0.03		1	E200.7	02/27/08 21:21/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 22:20/eli-c
Manganese	ND	mg/L		0.01		1	E200.8	02/21/08 22:20/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/21/08 22:20/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/21/08 22:20/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 8 of 11

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08020083-003  
Client Sample ID: DewBurd Sub02

Report Date: 04/30/08  
Collection Date: 02/10/08 17:00  
Date Received: 02/11/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 22:20/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/22/08 18:11/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/21/08 22:20/eli-c
Uranium	0.177	mg/L		0.0003		1	E200.8	02/22/08 18:11/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/21/08 22:20/eli-c
Zinc	ND	mg/L		0.01		1	E200.8	02/21/08 22:20/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	02/21/08 23:38/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	02/21/08 23:38/eli-c
<b>METALS - TOTAL</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	02/21/08 21:32/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	02/21/08 06:00/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 06:00/eli-c
Boron	0.5	mg/L		0.1		1	E200.7	02/27/08 21:31/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	02/21/08 06:00/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 06:00/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	02/11/08 16:09/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	04/15/08 00:00/kl
Copper	ND	mg/L		0.01		1	E200.8	02/21/08 06:00/eli-c
Iron	0.22	mg/L		0.03		1	E200.7	02/27/08 21:31/eli-c
Lead	ND	mg/L		0.001		1	E200.8	02/21/08 06:00/eli-c
Manganese	0.04	mg/L		0.01		1	E200.8	02/21/08 06:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/21/08 06:00/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/21/08 06:00/eli-c
Nickel	ND	mg/L		0.05		1	E200.8	02/21/08 06:00/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 06:00/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	02/21/08 06:00/eli-c
Uranium	0.168	mg/L	D	0.0005		1	E200.8	02/21/08 06:00/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/21/08 06:00/eli-c
Zinc	ND	mg/L		0.02		1	E200.8	02/21/08 21:32/eli-c
Calcium	579	mg/L	D	0.8		10	E200.7	02/27/08 19:33/eli-c
Magnesium	201	mg/L		0.5		1	E200.7	02/27/08 21:31/eli-c
Potassium	23.6	mg/L		0.5		1	E200.7	02/27/08 21:31/eli-c
Silica	2.9	mg/L		0.1		1	E200.7	02/27/08 21:31/eli-c
Sodium	175	mg/L		0.5		1	E200.7	02/27/08 21:31/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 9 of 11

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020083-003  
**Client Sample ID:** DewBurd Sub02

**Report Date:** 04/30/08  
**Collection Date:** 02/10/08 17:00  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium	0.002	mg/L		0.001			1	A3114 B	02/19/08 12:08/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	02/19/08 10:18/eli-c
Selenium-VI	ND	mg/L		0.001			1	A3114 B	02/19/08 12:26/eli-c
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	0.002	mg/L		0.001			1	A3114 B	02/19/08 17:23/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	02/19/08 15:35/eli-c
Selenium-VI	0.002	mg/L		0.001			1	A3114 B	02/19/08 17:37/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Radium 226	0.4	pCi/L		0.2			1	E903.0	03/03/08 11:48/eli-c
Thorium 230	0.4	pCi/L		0.2			1	E907.0	02/22/08 14:15/eli-c
Thorium 230 precision (±)	0.03	pCi/L					1	E907.0	02/22/08 14:15/eli-c
Radium 226 precision (±)	0.1	pCi/L					1	E903.0	03/03/08 11:48/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>									
Radium 226	ND	pCi/L		0.2			1	E903.0	02/25/08 14:45/eli-c
Thorium 230	0.4	pCi/L		0.2			1	E907.0	02/21/08 16:15/eli-c
Thorium 230 precision (±)	0.3	pCi/L					1	E907.0	02/21/08 16:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	131	pCi/L		1.0			1	E900.0	02/29/08 03:49/eli-c
Gross Alpha precision (±)	5.3	pCi/L					1	E900.0	02/29/08 03:49/eli-c
Gross Beta	81.5	pCi/L		2.0			1	E900.0	02/29/08 03:49/eli-c
Gross Beta precision (±)	8.4	pCi/L					1	E900.0	02/29/08 03:49/eli-c
Gross Gamma	ND	pCi/L		20.0			1	E901.1	02/19/08 08:48/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Radium 226	0.6	pCi/L		0.2			1	E903.0	03/04/08 19:56/eli-c
Radium 226 precision (±)	0.2	pCi/L					1	E903.0	03/04/08 19:56/eli-c
Thorium 230	0.5	pCi/L		0.2			1	E907.0	02/22/08 14:15/eli-c
Thorium 230 precision (±)	0.04	pCi/L					1	E907.0	02/22/08 14:15/eli-c
<b>DATA QUALITY</b>									
A/C Balance (± 5)	-3.33						1	A1030 E	04/15/08 00:00/lkl
Anions	54.6	meq/L					1	A1030 E	04/15/08 00:00/lkl
Cations	51.1	meq/L					1	A1030 E	04/15/08 00:00/lkl
Solids, Total Dissolved Calculated	3510	mg/L					1	A1030 E	04/15/08 00:00/lkl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

**MCL - Maximum contaminant level.**  
**ND - Not detected at the reporting limit.**

Page 10 of 11





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020083-003  
**Client Sample ID:** DewBurd Sub02

**Report Date:** 04/30/08  
**Collection Date:** 02/10/08 17:00  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>DATA QUALITY</b>									
TDS Balance (0.80 - 1.20)	0.830						1	A1030 E	04/15/08 00:00/kl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 11 of 11



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060347-002  
**Client Sample ID:** DewBurd SUB02

**Report Date:** 08/21/08  
**Collection Date:** 06/18/08 13:05  
**Date Received:** 06/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	06/19/08 11:58/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	96	mg/L		5		1	A2320 B	06/25/08 11:15/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 11:15/mb
Bicarbonate as HCO3	117	mg/L		5		1	A2320 B	06/25/08 11:15/mb
Calcium	609	mg/L		0.5		2	E200.7	07/10/08 16:43/eli-c
Chloride	19	mg/L		1		5	E300.0	06/21/08 01:27/jmh
Fluoride	0.9	mg/L		0.1		1	E300.0	06/20/08 02:05/jmh
Magnesium	204	mg/L		0.5		2	E200.7	07/10/08 16:43/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/19/08 12:26/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/20/08 02:05/jmh
Potassium	20	mg/L		1		2	E200.7	07/10/08 16:43/eli-c
Silica	ND	mg/L		0.5		2	E200.7	07/10/08 16:43/eli-c
Sodium	172	mg/L	D	2		2	E200.7	07/10/08 16:43/eli-c
Sulfate	2310	mg/L	D	3		50	E300.0	06/20/08 01:49/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3540	umhos/cm		5.0		1	A2510 B	06/23/08 10:50/tb
pH	8.08	s.u.		0.01		1	A4500-H B	06/23/08 10:16/tb
Sodium Adsorption Ratio (SAR)	1.5	unitless		0.10		1	Calculation	08/20/08 15:29/ADM
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	3800	mg/L		5		1	A2540 C	06/20/08 08:28/mb
Solids, Total Suspended TSS @ 105 C	7	mg/L		5		1	A2540 D	06/19/08 15:38/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		1	E200.8	07/23/08 12:54/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/23/08 12:54/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/10/08 16:43/eli-c
Boron	0.5	mg/L		0.1		2	E200.7	07/10/08 16:43/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 13:03/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	07/10/08 16:43/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/23/08 12:54/eli-c
Iron	0.05	mg/L		0.03		2	E200.7	07/10/08 16:43/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 12:54/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/10/08 16:43/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 12:54/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/10/08 16:43/eli-c
Nickel	ND	mg/L		0.01		2	E200.7	07/10/08 16:43/eli-c

**Report Definitions:** RL - Analyte reporting limit.  
 QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-002  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:05  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Silver	ND	mg/L		0.005		1	E200.8	07/25/08 13:03/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/23/08 12:54/eli-c
Uranium	0.175	mg/L		0.0003		1	E200.8	07/23/08 12:54/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	07/23/08 12:54/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/10/08 16:43/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	07/28/08 22:14/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8	07/28/08 22:14/eli-c
<b>METALS - TOTAL</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	07/07/08 22:50/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/18/08 13:26/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/07/08 22:50/eli-c
Boron	0.5	mg/L		0.1		2	E200.7	07/07/08 22:50/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/18/08 13:26/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/07/08 22:50/eli-c
Chromium, Hexavalent	0.005	mg/L		0.005		1	A3500-Cr B	06/19/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	08/20/08 00:00/kl
Copper	ND	mg/L		0.01		2	E200.7	07/07/08 22:50/eli-c
Iron	0.18	mg/L		0.03		2	E200.7	07/07/08 22:50/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/18/08 13:26/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/07/08 22:50/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/07/08 22:50/eli-c
Nickel	ND	mg/L		0.05		2	E200.7	07/07/08 22:50/eli-c
Silver	ND	mg/L		0.005		1	E200.8	07/18/08 13:26/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/18/08 13:26/eli-c
Uranium	0.190	mg/L		0.0003		1	E200.8	07/18/08 13:26/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/07/08 22:50/eli-c
Zinc	ND	mg/L		0.01		2	E200.7	07/07/08 22:50/eli-c
Calcium	602	mg/L		0.5		2	E200.7	07/07/08 22:50/eli-c
Magnesium	204	mg/L		0.5		2	E200.7	07/07/08 22:50/eli-c
Potassium	21.1	mg/L		0.5		2	E200.7	07/07/08 22:50/eli-c
Silica	ND	mg/L		0.5		2	E200.7	07/07/08 22:50/eli-c
Sodium	180	mg/L	D	1		2	E200.7	07/07/08 22:50/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	07/19/08 14:45/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 11:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-002  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:05  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.003	mg/L		0.001		1	A3114 B	07/22/08 15:04/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/22/08 11:22/eli-c
Selenium-VI	0.003	mg/L		0.001		1	A3114 B	07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	-1.0	pCi/L	U			1	E909.0M	07/18/08 08:20/eli-c
Lead 210 MDC	8.4	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/09/08 18:40/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	07/09/08 18:40/eli-c
Radium 226	0.7	pCi/L				1	E903.0	07/21/08 23:21/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/21/08 23:21/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	07/21/08 23:21/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	07/18/08 20:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/18/08 20:05/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	1.5	pCi/L	U			1	E909.0M	07/15/08 07:15/eli-c
Lead 210 precision (±)	8.7	pCi/L				1	E909.0M	07/15/08 07:15/eli-c
Lead 210 MDC	14.6	pCi/L				1	E909.0M	07/15/08 07:15/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.29	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	07/16/08 13:32/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/16/08 13:32/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/16/08 13:32/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1	E907.0	07/09/08 19:58/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/09/08 19:58/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	199	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha precision (±)	18.4	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha MDC	12.8	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta	80.1	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta precision (±)	12.2	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta MDC	17.9	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Gamma	0.0	pCi/L	U	20.0		1	E901.1	06/26/08 18:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-002  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:05  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>RADIONUCLIDES - TOTAL</b>									
Gross Gamma precision (±)	20	pCi/L					1	E901.1	06/26/08 18:46/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	0.5	pCi/L	U				1	E909.0M	08/20/08 12:33/eli-c
Lead 210 precision (±)	10	pCi/L					1	E909.0M	08/20/08 12:33/eli-c
Polonium 210	0.3	pCi/L	U	1.0			1	RMO-3008	08/20/08 12:33/eli-c
Polonium 210 precision (±)	0.49	pCi/L					1	RMO-3008	08/20/08 12:33/eli-c
Radium 226	0.2	pCi/L	U				1	E903.0	08/20/08 12:33/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	08/20/08 12:33/eli-c
Thorium 230	0.2	pCi/L	U	0.2			1	E907.0	08/20/08 12:33/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	08/20/08 12:33/eli-c
<b>TOTAL METALS ANALYSES</b>									
Mercury	ND	mg/L		0.001			1	E245.1	07/02/08 09:57/eli-b
<b>DATA QUALITY</b>									
A/C Balance (± 5)	4.36	%					1	A1030 E	08/20/08 00:00/kl
Anions	50.6	meq/L					1	A1030 E	08/20/08 00:00/kl
Cations	55.2	meq/L					1	A1030 E	08/20/08 00:00/kl
Solids, Total Dissolved Calculated	3390	mg/L					1	A1030 E	08/20/08 00:00/kl
TDS Balance (0.80 - 1.20)	1.12						1	A1030 E	08/20/08 00:00/kl

Report RL - Analyte reporting limit. MCL - Maximum contaminant level. Page 8 of 16  
Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.  
MDC - Minimum detectable concentration U - Not detected at minimum detectable concentration



LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-003  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:10  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	06/19/08 11:58/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	98	mg/L		5		1	A2320 B	06/25/08 11:17/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 11:17/mb
Bicarbonate as HCO3	119	mg/L		5		1	A2320 B	06/25/08 11:17/mb
Calcium	620	mg/L		0.5		2	E200.7	07/10/08 16:47/eli-c
Chloride	19	mg/L		1		5	E300.0	06/21/08 01:44/jmh
Fluoride	0.8	mg/L		0.1		1	E300.0	06/20/08 02:38/jmh
Magnesium	211	mg/L		0.5		2	E200.7	07/10/08 16:47/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/19/08 12:30/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/20/08 02:38/jmh
Potassium	20	mg/L		1		2	E200.7	07/10/08 16:47/eli-c
Silica	ND	mg/L		0.5		2	E200.7	07/10/08 16:47/eli-c
Sodium	177	mg/L	D	2		2	E200.7	07/10/08 16:47/eli-c
Sulfate	2410	mg/L	D	3		50	E300.0	06/20/08 02:22/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	3640	umhos/cm		5.0		1	A2510 B	06/23/08 10:50/tb
pH	8.06	s.u.		0.01		1	A4500-H B	06/23/08 10:17/tb
Sodium Adsorption Ratio (SAR)	1.6	unitless		0.10		1	Calculation	08/20/08 15:29/ADM
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	3800	mg/L		5		1	A2540 C	06/20/08 08:28/mb
Solids, Total Suspended TSS @ 105 C	5	mg/L		5		1	A2540 D	06/19/08 15:39/mb
<b>METALS - DISSOLVED</b>								
Aluminum	ND	mg/L		0.1		2	E200.7	07/10/08 16:47/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/25/08 13:10/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/10/08 16:47/eli-c
Boron	0.5	mg/L		0.1		2	E200.7	07/10/08 16:47/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/25/08 13:10/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	07/10/08 16:47/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/25/08 13:10/eli-c
Iron	0.06	mg/L		0.03		2	E200.7	07/10/08 16:47/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 13:01/eli-c
Manganese	ND	mg/L		0.01		2	E200.7	07/10/08 16:47/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 13:01/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/10/08 16:47/eli-c
Nickel	ND	mg/L		0.01		2	E200.7	07/10/08 16:47/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

### LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-003  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:10  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED</b>							
Silver	ND	mg/L		0.005		1	E200.8 07/25/08 13:10/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 07/23/08 13:01/eli-c
Uranium	0.174	mg/L		0.0003		1	E200.8 07/23/08 13:01/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8 07/25/08 13:10/eli-c
Zinc	ND	mg/L		0.01		2	E200.7 07/10/08 16:47/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001		1	E200.8 07/28/08 22:18/eli-c
Uranium	ND	mg/L		0.0003		1	E200.8 07/28/08 22:18/eli-c
<b>METALS - TOTAL</b>							
Aluminum	ND	mg/L		0.1		2	E200.7 07/07/08 22:54/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8 07/18/08 13:32/eli-c
Barium	ND	mg/L		0.1		2	E200.7 07/07/08 22:54/eli-c
Boron	0.5	mg/L		0.1		2	E200.7 07/07/08 22:54/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8 07/18/08 13:32/eli-c
Chromium	ND	mg/L		0.05		2	E200.7 07/07/08 22:54/eli-c
Chromium, Hexavalent	0.02	mg/L	B	0.005		1	A3500-Cr B 06/19/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation 08/20/08 00:00/lkl
Copper	ND	mg/L		0.01		2	E200.7 07/07/08 22:54/eli-c
Iron	0.25	mg/L		0.03		2	E200.7 07/07/08 22:54/eli-c
Lead	ND	mg/L		0.001		1	E200.8 07/18/08 13:32/eli-c
Manganese	0.01	mg/L		0.01		2	E200.7 07/07/08 22:54/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7 07/07/08 22:54/eli-c
Nickel	ND	mg/L		0.05		2	E200.7 07/07/08 22:54/eli-c
Silver	ND	mg/L		0.005		1	E200.8 07/18/08 13:32/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 07/18/08 13:32/eli-c
Uranium	0.190	mg/L		0.0003		1	E200.8 07/18/08 13:32/eli-c
Vanadium	0.1	mg/L		0.1		2	E200.7 07/07/08 22:54/eli-c
Zinc	ND	mg/L		0.01		2	E200.7 07/07/08 22:54/eli-c
Calcium	627	mg/L		0.5		2	E200.7 07/07/08 22:54/eli-c
Magnesium	207	mg/L		0.5		2	E200.7 07/07/08 22:54/eli-c
Potassium	21.5	mg/L		0.5		2	E200.7 07/07/08 22:54/eli-c
Silica	ND	mg/L		0.5		2	E200.7 07/07/08 22:54/eli-c
Sodium	179	mg/L	D	1		2	E200.7 07/07/08 22:54/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.005		1	A3114 B 07/19/08 14:47/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 07/19/08 11:48/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
B - The analyte was detected in the method blank.

Page 10 of 16





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-003  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:10  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium-VI	0.001	mg/L		0.001		1 A3114 B	07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	0.001	mg/L		0.001		1 A3114 B	07/22/08 15:06/eli-c
Selenium-IV	ND	mg/L		0.001		1 A3114 B	07/22/08 11:24/eli-c
Selenium-VI	0.001	mg/L		0.001		1 A3114 B	07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Lead 210	-0.9	pCi/L	U			1 E909.0M	07/18/08 08:20/eli-c
Lead 210 MDC	8.4	pCi/L				1 E909.0M	07/18/08 08:20/eli-c
Lead 210 precision (±)	5.0	pCi/L				1 E909.0M	07/18/08 08:20/eli-c
Polonium 210	-0.2	pCi/L	U	1.0		1 RMO-3008	07/09/08 18:40/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1 RMO-3008	07/09/08 18:40/eli-c
Radium 226	0.6	pCi/L				1 E903.0	07/22/08 02:22/eli-c
Radium 226 precision (±)	0.1	pCi/L				1 E903.0	07/22/08 02:22/eli-c
Radium 226 MDC	0.1	pCi/L				1 E903.0	07/22/08 02:22/eli-c
Thorium 230	0.1	pCi/L	U	0.2		1 E907.0	07/18/08 20:05/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1 E907.0	07/18/08 20:05/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Lead 210	-0.5	pCi/L	U			1 E909.0M	07/15/08 07:15/eli-c
Lead 210 precision (±)	8.7	pCi/L				1 E909.0M	07/15/08 07:15/eli-c
Lead 210 MDC	14.6	pCi/L				1 E909.0M	07/15/08 07:15/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1 RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.31	pCi/L				1 RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.5	pCi/L	U			1 E903.0	07/16/08 13:32/eli-c
Radium 226 precision (±)	0.2	pCi/L				1 E903.0	07/16/08 13:32/eli-c
Radium 226 MDC	0.5	pCi/L				1 E903.0	07/16/08 13:32/eli-c
Thorium 230	0.3	pCi/L		0.2		1 E907.0	07/09/08 19:58/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1 E907.0	07/09/08 19:58/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	201	pCi/L				1 E900.0	07/26/08 03:41/eli-c
Gross Alpha precision (±)	18.2	pCi/L				1 E900.0	07/26/08 03:41/eli-c
Gross Alpha MDC	12.5	pCi/L				1 E900.0	07/26/08 03:41/eli-c
Gross Beta	88.7	pCi/L				1 E900.0	07/26/08 03:41/eli-c
Gross Beta precision (±)	9.8	pCi/L				1 E900.0	07/26/08 03:41/eli-c
Gross Beta MDC	13.7	pCi/L				1 E900.0	07/26/08 03:41/eli-c
Gross Gamma	0.0	pCi/L	U	20.0		1 E901.1	06/26/08 18:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-003  
Client Sample ID: DewBurd SUB02

Report Date: 08/21/08  
Collection Date: 06/18/08 13:10  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>RADIONUCLIDES - TOTAL</b>									
Gross Gamma precision (±)	20	pCi/L					1	E901.1	06/26/08 18:46/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	-1.4	pCi/L	U				1	E909.0M	08/20/08 12:33/eli-c
Lead 210 precision (±)	10	pCi/L					1	E909.0M	08/20/08 12:33/eli-c
Polonium 210	0.1	pCi/L	U	1.0			1	RMO-3008	08/20/08 12:33/eli-c
Polonium 210 precision (±)	0.51	pCi/L					1	RMO-3008	08/20/08 12:33/eli-c
Radium 226	0.1	pCi/L	U				1	E903.0	08/20/08 12:33/eli-c
Radium 226 precision (±)	0.3	pCi/L					1	E903.0	08/20/08 12:33/eli-c
Thorium 230	0.4	pCi/L		0.2			1	E907.0	08/20/08 12:33/eli-c
Thorium 230 precision (±)	0.4	pCi/L					1	E907.0	08/20/08 12:33/eli-c
<b>TOTAL METALS ANALYSES</b>									
Mercury	ND	mg/L		0.001			1	E245.1	07/02/08 09:59/eli-b
<b>DATA QUALITY</b>									
A/C Balance (± 5)	3.39	%					1	A1030 E	08/20/08 00:00/kl
Anions	52.8	meq/L					1	A1030 E	08/20/08 00:00/kl
Cations	56.5	meq/L					1	A1030 E	08/20/08 00:00/kl
Solids, Total Dissolved Calculated	3520	mg/L					1	A1030 E	08/20/08 00:00/kl
TDS Balance (0.80 - 1.20)	1.07						1	A1030 E	08/20/08 00:00/kl

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

Page 12 of 16



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-003  
Client Sample ID: DewBurdSub03

Report Date: 01/29/08  
Collection Date: 11/12/07 14:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	11/13/07 12:50/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	11/26/07 16:21/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:21/sn
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	11/26/07 16:21/sn
Calcium	128	mg/L		0.5		1	E200.7	11/27/07 19:51/eli-c
Chloride	9	mg/L		1		1	E300.0	11/15/07 04:30/jmh
Fluoride	0.2	mg/L		0.1		1	E300.0	11/15/07 04:30/jmh
Magnesium	53.4	mg/L		0.5		1	E200.7	11/27/07 19:51/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:50/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/15/07 04:30/jmh
Potassium	35	mg/L		1		1	E200.7	11/27/07 19:51/eli-c
Silica	7.5	mg/L		0.5		1	E200.7	11/27/07 19:51/eli-c
Sodium	8.2	mg/L	D	0.8		1	E200.7	11/27/07 19:51/eli-c
Sulfate	699	mg/L	D	40		50	E300.0	11/15/07 04:14/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1080	umhos/cm		5.0		1	A2510 B	11/16/07 18:24/jmh
pH	4.58	s.u.		0.01		1	A4500-H B	11/16/07 14:28/jmh
Sodium Adsorption Ratio (SAR)	0.15	unitless		0.10		1	Calculation	12/16/07 16:13/eli-c
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	11/14/07 17:19/jmh
Solids, Total Dissolved TDS @ 180 C	970	mg/L		5		1	A2540 C	11/15/07 17:09/jmh
Solids, Total Suspended TSS @ 105 C	6	mg/L		5		1	A2540 D	11/19/07 13:46/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	0.6	mg/L		0.1		10	E200.8	11/22/07 00:12/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/20/07 01:35/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/20/07 01:35/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 19:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	11/20/07 01:35/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	11/20/07 01:35/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/20/07 01:35/eli-c
Iron	0.12	mg/L		0.03		1	E200.7	11/27/07 19:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	11/20/07 01:35/eli-c
Manganese	11.6	mg/L		0.01		10	E200.8	11/22/07 00:12/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 01:35/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/20/07 01:35/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07110147-003  
**Client Sample ID:** DewBurdSub03

**Report Date:** 01/29/08  
**Collection Date:** 11/12/07 14:50  
**Date Received:** 11/13/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By	
				RL	QCL			
<b>METALS - DISSOLVED</b>								
Nickel	0.23	mg/L		0.01		1	E200.8	11/20/07 01:35/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 12:48/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/20/07 01:35/eli-c
Uranium	0.0014	mg/L		0.0003		1	E200.8	11/20/07 01:35/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/20/07 01:35/eli-c
Zinc	0.16	mg/L		0.01		1	E200.8	11/20/07 01:35/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	11/21/07 04:35/eli-c
Uranium	0.0008	mg/L		0.0003		1	E200.8	11/21/07 04:35/eli-c
<b>METALS - TOTAL</b>								
Aluminum	0.7	mg/L		0.1		10	E200.8	11/20/07 22:22/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	11/20/07 22:22/eli-c
Barium	ND	mg/L		0.1		10	E200.8	11/20/07 22:22/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 19:38/eli-c
Cadmium	ND	mg/L		0.005		10	E200.8	11/20/07 22:22/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	11/20/07 22:22/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	11/12/07 00:00/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/16/07 16:26/eli-c
Copper	ND	mg/L		0.01		10	E200.8	11/20/07 22:22/eli-c
Iron	0.16	mg/L		0.03		1	E200.7	11/27/07 19:38/eli-c
Lead	ND	mg/L		0.001		10	E200.8	11/20/07 22:22/eli-c
Manganese	12.2	mg/L		0.01		10	E200.8	11/20/07 22:22/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/20/07 22:22/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	11/20/07 22:22/eli-c
Nickel	0.23	mg/L		0.05		10	E200.8	11/20/07 22:22/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/20/07 22:22/eli-c
Thorium 232	ND	mg/L		0.005		10	E200.8	11/20/07 22:22/eli-c
Uranium	0.0014	mg/L		0.0003		10	E200.8	11/20/07 22:22/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	11/20/07 22:22/eli-c
Zinc	0.17	mg/L		0.01		10	E200.8	11/20/07 22:22/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 14:06/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/28/07 09:38/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/28/07 15:15/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-003  
Client Sample ID: DewBurdSub03

Report Date: 01/29/08  
Collection Date: 11/12/07 14:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 14:15/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/28/07 09:47/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/28/07 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	4.5	pCi/L		0.2		1	E903.0	11/27/07 01:57/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	11/27/07 01:57/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/27/07 15:15/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 22:00/eli-c
Thorium 230	1.3	pCi/L		0.2		1	E907.0	12/27/07 14:30/eli-c
Thorium 230 precision (±)	0.7	pCi/L				1	E907.0	12/27/07 14:30/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	16.6	pCi/L		1.0		1	E900.0	12/04/07 04:32/eli-c
Gross Alpha precision (±)	1.1	pCi/L				1	E900.0	12/04/07 04:32/eli-c
Gross Beta	38.8	pCi/L		2.0		1	E900.0	12/04/07 04:32/eli-c
Gross Beta precision (±)	2.5	pCi/L				1	E900.0	12/04/07 04:32/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	2.5	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.7	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	4.0	pCi/L		0.2		1	E903.0	11/26/07 12:39/eli-c
Radium 226 precision (±)	0.7	pCi/L				1	E903.0	11/26/07 12:39/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	12/27/07 15:15/eli-c
Gross Gamma	1270	pCi/L		20.0		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	230	pCi/L				1	E901.1	11/16/07 10:50/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	0.0673	%				1	A1030 E	12/16/07 16:30/eli-c
Anions	12.9	meq/L				1	A1030 E	12/16/07 16:30/eli-c
Cations	12.9	meq/L				1	A1030 E	12/16/07 16:30/eli-c
Solids, Total Dissolved Calculated	851	mg/L				1	A1030 E	12/16/07 16:30/eli-c
TDS Balance (0.80 - 1.20)	1.14	dec. %				1	A1030 E	12/16/07 16:30/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-003  
Client Sample ID: DewBurdSub03

Report Date: 01/29/08  
Collection Date: 11/12/07 14:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/	DF	Method	Analysis Date / By
					QCL			

DATA QUALITY

- Ion Balance achieved using Sulfate from E200.7.

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-004  
Client Sample ID: DewBurd SUB03

Report Date: 08/21/08  
Collection Date: 06/18/08 14:15  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	06/19/08 11:58/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	06/25/08 11:19/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 11:19/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	06/25/08 11:19/mb
Calcium	130	mg/L		0.5		2	E200.7	07/10/08 16:51/eli-c
Chloride	2	mg/L		1		1	E300.0	06/20/08 04:17/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/20/08 04:17/jmh
Magnesium	47.4	mg/L		0.5		2	E200.7	07/10/08 16:51/eli-c
Nitrogen, Ammonia as N	0.1	mg/L		0.1		1	A4500-NH3 G	06/19/08 12:33/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/20/08 04:17/jmh
Potassium	16	mg/L		1		2	E200.7	07/10/08 16:51/eli-c
Silica	2.1	mg/L		0.5		2	E200.7	07/10/08 16:51/eli-c
Sodium	4	mg/L	D	2		2	E200.7	07/10/08 16:51/eli-c
Sulfate	510	mg/L	D	3		50	E300.0	06/20/08 03:28/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	975	umhos/cm		5.0		1	A2510 B	06/23/08 10:51/tb
pH	4.40	s.u.		0.01		1	A4500-H B	06/23/08 10:17/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	08/20/08 15:29/ADM
Solids, Suspended Sediment SSC @ 105 C	37	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	820	mg/L		5		1	A2540 C	06/20/08 08:29/mb
Solids, Total Suspended TSS @ 105 C	26	mg/L		5		1	A2540 D	06/19/08 15:39/mb
<b>METALS - DISSOLVED</b>								
Aluminum	0.6	mg/L		0.1		2	E200.7	07/10/08 16:51/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/25/08 13:17/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/10/08 16:51/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/10/08 16:51/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/23/08 13:07/eli-c
Chromium	ND	mg/L		0.01		2	E200.7	07/10/08 16:51/eli-c
Copper	ND	mg/L		0.01		1	E200.8	07/25/08 13:17/eli-c
Iron	0.24	mg/L		0.03		2	E200.7	07/10/08 16:51/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/23/08 13:07/eli-c
Manganese	8.44	mg/L		0.01		2	E200.7	07/10/08 16:51/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/23/08 13:07/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/10/08 16:51/eli-c
Nickel	0.17	mg/L		0.01		2	E200.7	07/10/08 16:51/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-004  
Client Sample ID: DewBurd SUB03

Report Date: 08/21/08  
Collection Date: 06/18/08 14:15  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED</b>							
Silver	ND	mg/L		0.005		1	E200.8 07/23/08 13:07/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 07/23/08 13:07/eli-c
Uranium	0.0023	mg/L		0.0003		1	E200.8 07/23/08 13:07/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8 07/25/08 13:17/eli-c
Zinc	0.10	mg/L		0.01		2	E200.7 07/10/08 16:51/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001		1	E200.8 07/28/08 22:22/eli-c
Uranium	0.0004	mg/L		0.0003		1	E200.8 07/28/08 22:22/eli-c
<b>METALS - TOTAL</b>							
Aluminum	1.2	mg/L		0.1		2	E200.7 07/07/08 22:58/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8 07/18/08 13:39/eli-c
Barium	ND	mg/L		0.1		2	E200.7 07/07/08 22:58/eli-c
Boron	0.1	mg/L		0.1		2	E200.7 07/07/08 22:58/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8 07/18/08 13:39/eli-c
Chromium	ND	mg/L		0.05		2	E200.7 07/07/08 22:58/eli-c
Chromium, Hexavalent	0.006	mg/L	B	0.005		1	A3500-Cr B 06/19/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation 08/20/08 00:00/lkl
Copper	ND	mg/L		0.01		2	E200.7 07/07/08 22:58/eli-c
Iron	1.10	mg/L		0.03		2	E200.7 07/07/08 22:58/eli-c
Lead	ND	mg/L		0.001		1	E200.8 07/18/08 13:39/eli-c
Manganese	8.43	mg/L		0.01		2	E200.7 07/07/08 22:58/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7 07/07/08 22:58/eli-c
Nickel	0.17	mg/L		0.05		2	E200.7 07/07/08 22:58/eli-c
Silver	ND	mg/L		0.005		1	E200.8 07/18/08 13:39/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8 07/18/08 13:39/eli-c
Uranium	0.0031	mg/L		0.0003		1	E200.8 07/18/08 13:39/eli-c
Vanadium	0.2	mg/L		0.1		2	E200.7 07/07/08 22:58/eli-c
Zinc	0.08	mg/L		0.01		2	E200.7 07/07/08 22:58/eli-c
Calcium	132	mg/L		0.5		2	E200.7 07/07/08 22:58/eli-c
Magnesium	48.6	mg/L		0.5		2	E200.7 07/07/08 22:58/eli-c
Potassium	17.9	mg/L		0.5		2	E200.7 07/07/08 22:58/eli-c
Silica	3.8	mg/L		0.5		2	E200.7 07/07/08 22:58/eli-c
Sodium	5	mg/L	D	1		2	E200.7 07/07/08 22:58/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium	ND	mg/L		0.005		1	A3114 B 07/19/08 14:50/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B 07/19/08 11:50/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
B - The analyte was detected in the method blank.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060347-004  
Client Sample ID: DewBurd SUB03

Report Date: 08/21/08  
Collection Date: 06/18/08 14:15  
Date Received: 06/19/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	07/22/08 15:08/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/22/08 11:26/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	-3.0	pCi/L	U			1	E909.0M	07/18/08 08:20/eli-c
Lead 210 MDC	8.4	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Lead 210 precision (±)	4.9	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Polonium 210	0.0	pCi/L	U	1.0		1	RMO-3008	07/09/08 18:40/eli-c
Polonium 210 precision (±)	0.30	pCi/L				1	RMO-3008	07/09/08 18:40/eli-c
Radium 226	2.6	pCi/L				1	E903.0	07/22/08 05:23/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/22/08 05:23/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	07/22/08 05:23/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/18/08 20:05/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/18/08 20:05/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	-0.8	pCi/L	U			1	E909.0M	07/15/08 07:15/eli-c
Lead 210 precision (±)	8.7	pCi/L				1	E909.0M	07/15/08 07:15/eli-c
Lead 210 MDC	14.6	pCi/L				1	E909.0M	07/15/08 07:15/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.09	pCi/L	U			1	E903.0	07/16/08 13:32/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/16/08 13:32/eli-c
Radium 226 MDC	0.6	pCi/L				1	E903.0	07/16/08 13:32/eli-c
Thorium 230	0.4	pCi/L		0.2		1	E907.0	07/10/08 12:56/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	07/10/08 12:56/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	19.9	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha precision (±)	2.8	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Alpha MDC	2.6	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta	21.8	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta precision (±)	2.2	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Beta MDC	3.0	pCi/L				1	E900.0	07/26/08 03:41/eli-c
Gross Gamma	1080	pCi/L		20.0		1	E901.1	06/26/08 18:46/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060347-004  
**Client Sample ID:** DewBurd SUB03

**Report Date:** 08/21/08  
**Collection Date:** 06/18/08 14:15  
**Date Received:** 06/19/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>RADIONUCLIDES - TOTAL</b>							
Gross Gamma precision (±)	153	pCi/L				1 E901.1	06/26/08 18:46/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>							
Lead 210	-3.8	pCi/L	U			1 E909.0M	08/20/08 12:33/eli-c
Lead 210 precision (±)	10	pCi/L				1 E909.0M	08/20/08 12:33/eli-c
Polonium 210	0.5	pCi/L	U	1.0		1 RMO-3008	08/20/08 12:33/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1 RMO-3008	08/20/08 12:33/eli-c
Radium 226	2.5	pCi/L				1 E903.0	08/20/08 12:33/eli-c
Radium 226 precision (±)	0.5	pCi/L				1 E903.0	08/20/08 12:33/eli-c
Thorium 230	0.3	pCi/L		0.2		1 E907.0	08/20/08 12:33/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1 E907.0	08/20/08 12:33/eli-c
<b>TOTAL METALS ANALYSES</b>							
Mercury	ND	mg/L		0.001		1 E245.1	07/02/08 10:02/eli-b
<b>DATA QUALITY</b>							
A/C Balance (± 5)	4.34	%				1 A1030 E	08/20/08 00:00/kl
Anions	10.7	meq/L				1 A1030 E	08/20/08 00:00/kl
Cations	11.7	meq/L				1 A1030 E	08/20/08 00:00/kl
Solids, Total Dissolved Calculated	716	mg/L				1 A1030 E	08/20/08 00:00/kl
TDS Balance (0.80 - 1.20)	1.15					1 A1030 E	08/20/08 00:00/kl

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-002  
Client Sample ID: DewBurdSub04

Report Date: 01/29/08  
Collection Date: 11/12/07 13:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	11/13/07 12:50/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	11/26/07 16:20/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	11/26/07 16:20/sn
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	11/26/07 16:20/sn
Calcium	201	mg/L		0.5		1	E200.7	11/27/07 19:48/eli-c
Chloride	18	mg/L		1		1	E300.0	11/15/07 03:58/jmh
Fluoride	0.6	mg/L		0.1		1	E300.0	11/15/07 03:58/jmh
Magnesium	99.5	mg/L		0.5		1	E200.7	11/27/07 19:48/eli-c
Nitrogen, Ammonia as N	0.3	mg/L		0.1		1	A4500-NH3 G	11/13/07 17:49/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	11/15/07 03:58/jmh
Potassium	46	mg/L		1		1	E200.7	11/27/07 19:48/eli-c
Silica	16.2	mg/L		0.5		1	E200.7	11/27/07 19:48/eli-c
Sodium	17.1	mg/L	D	0.8		1	E200.7	11/27/07 19:48/eli-c
Sulfate	1200	mg/L	D	40		50	E300.0	11/15/07 03:42/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	1650	umhos/cm		5.0		1	A2510 B	11/16/07 18:23/jmh
pH	4.65	s.u.		0.01		1	A4500-H B	11/16/07 14:27/jmh
Sodium Adsorption Ratio (SAR)	0.25	unitless		0.10		1	Calculation	12/16/07 16:13/eli-c
Solids, Suspended Sediment SSC @ 105 C	12	mg/L		5		1	D3977	11/14/07 17:19/jmh
Solids, Total Dissolved TDS @ 180 C	1700	mg/L		5		1	A2540 C	11/15/07 16:10/jmh
Solids, Total Suspended TSS @ 105 C	23	mg/L		5		1	A2540 D	11/19/07 13:45/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	1.2	mg/L		0.1		10	E200.8	11/22/07 00:05/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	11/20/07 01:28/eli-c
Barium	ND	mg/L		0.1		1	E200.8	11/20/07 01:28/eli-c
Boron	0.1	mg/L		0.1		1	E200.7	11/27/07 19:48/eli-c
Cadmium	0.008	mg/L		0.005		1	E200.8	11/20/07 01:28/eli-c
Chromium	ND	mg/L		0.01		1	E200.8	11/20/07 01:28/eli-c
Copper	ND	mg/L		0.01		1	E200.8	11/20/07 01:28/eli-c
Iron	1.48	mg/L		0.03		1	E200.7	11/27/07 19:48/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	11/20/07 01:28/eli-c
Manganese	20.4	mg/L		0.01		10	E200.8	11/22/07 00:05/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	11/20/07 01:28/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	11/20/07 01:28/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 5 of 16

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-002  
Client Sample ID: DewBurdSub04

Report Date: 01/29/08  
Collection Date: 11/12/07 13:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	0.43	mg/L		0.01		1	E200.8	11/20/07 01:28/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/26/07 12:41/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	11/20/07 01:28/eli-c
Uranium	0.0021	mg/L		0.0003		1	E200.8	11/20/07 01:28/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	11/20/07 01:28/eli-c
Zinc	0.37	mg/L		0.01		1	E200.8	11/20/07 01:28/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	11/21/07 04:28/eli-c
Uranium	0.0014	mg/L		0.0003		1	E200.8	11/21/07 04:28/eli-c
<b>METALS - TOTAL</b>								
Aluminum	1.5	mg/L		0.1		10	E200.8	11/20/07 22:15/eli-c
Arsenic	ND	mg/L		0.001		10	E200.8	11/20/07 22:15/eli-c
Barium	ND	mg/L		0.1		10	E200.8	11/20/07 22:15/eli-c
Boron	ND	mg/L		0.1		1	E200.7	11/27/07 19:35/eli-c
Cadmium	0.008	mg/L		0.005		10	E200.8	11/20/07 22:15/eli-c
Chromium	ND	mg/L		0.05		10	E200.8	11/20/07 22:15/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.05		10	A3500-Cr B	11/12/07 00:00/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/16/07 16:26/eli-c
Copper	ND	mg/L		0.01		10	E200.8	11/20/07 22:15/eli-c
Iron	3.73	mg/L		0.03		1	E200.7	11/27/07 19:35/eli-c
Lead	ND	mg/L		0.001		10	E200.8	11/20/07 22:15/eli-c
Manganese	21.3	mg/L		0.01		10	E200.8	11/20/07 22:15/eli-c
Mercury	ND	mg/L		0.001		10	E200.8	11/20/07 22:15/eli-c
Molybdenum	ND	mg/L		0.1		10	E200.8	11/20/07 22:15/eli-c
Nickel	0.44	mg/L		0.05		10	E200.8	11/20/07 22:15/eli-c
Silver	ND	mg/L		0.005		10	E200.8	11/20/07 22:15/eli-c
Thorium 232	ND	mg/L		0.005		10	E200.8	11/20/07 22:15/eli-c
Uranium	0.0024	mg/L		0.0003		10	E200.8	11/20/07 22:15/eli-c
Vanadium	ND	mg/L		0.1		10	E200.8	11/20/07 22:15/eli-c
Zinc	0.41	mg/L		0.01		10	E200.8	11/20/07 22:15/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 14:04/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/28/07 09:36/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/28/07 15:15/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 6 of 16

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-002  
Client Sample ID: DewBurdSub04

Report Date: 01/29/08  
Collection Date: 11/12/07 13:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	ND	mg/L		0.001		1	A3114 B	11/28/07 14:13/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	11/28/07 09:44/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	11/28/07 15:15/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	2.2	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	1.5	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	3.4	pCi/L		0.2		1	E903.0	11/27/07 00:57/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	11/27/07 00:57/eli-c
Thorium 230	0.9	pCi/L		0.2		1	E907.0	11/28/07 15:00/eli-c
Thorium 230 precision (±)	0.5	pCi/L				1	E907.0	11/28/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	12/03/07 04:30/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	11/26/07 12:30/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	12/02/07 20:59/eli-c
Thorium 230	0.5	pCi/L		0.2		1	E907.0	11/26/07 14:10/eli-c
Thorium 230 precision (±)	0.4	pCi/L				1	E907.0	11/26/07 14:10/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	13.6	pCi/L		1.0		1	E900.0	12/04/07 04:33/eli-c
Gross Alpha precision (±)	1.7	pCi/L				1	E900.0	12/04/07 04:33/eli-c
Gross Beta	51.3	pCi/L		2.0		1	E900.0	12/04/07 04:33/eli-c
Gross Beta precision (±)	4.2	pCi/L				1	E900.0	12/04/07 04:33/eli-c
Lead 210	ND	pCi/L		1.0		1	E909.0M	11/21/07 07:30/eli-c
Polonium 210	3.4	pCi/L		1.0		1	RMO-3008	11/20/07 13:30/eli-c
Polonium 210 precision (±)	2.0	pCi/L				1	RMO-3008	11/20/07 13:30/eli-c
Radium 226	3.5	pCi/L		0.2		1	E903.0	11/26/07 12:39/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	11/26/07 12:39/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	11/28/07 15:00/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	11/16/07 10:50/eli-c
Gross Gamma precision (±)	ND	pCi/L				1	E901.1	11/16/07 10:50/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.902	%				1	A1030 E	12/16/07 16:29/eli-c
Anions	22.3	meq/L				1	A1030 E	12/16/07 16:29/eli-c
Cations	21.9	meq/L				1	A1030 E	12/16/07 16:29/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110147-002  
Client Sample ID: DewBurdSub04

Report Date: 01/29/08  
Collection Date: 11/12/07 13:50  
Date Received: 11/13/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>DATA QUALITY</b>								
Solids, Total Dissolved Calculated	1450	mg/L					1	A1030 E 12/16/07 16:29/eli-c
TDS Balance (0.80 - 1.20)	1.18	dec. %					1	A1030 E 12/16/07 16:29/eli-c
- Ion Balance achieved using Sulfate from E200.7.								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060316-001  
Client Sample ID: DewBurd SUB04

Report Date: 08/20/08  
Collection Date: 06/17/08 14:00  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	06/18/08 10:55/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	06/25/08 10:42/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 10:42/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	06/25/08 10:42/mb
Calcium	64.8	mg/L		0.5		1	E200.7	07/07/08 17:57/eli-c
Chloride	2	mg/L		1		1	E300.0	06/19/08 21:43/jmh
Fluoride	0.4	mg/L		0.1		1	E300.0	06/19/08 21:43/jmh
Magnesium	27.3	mg/L		0.5		1	E200.7	07/07/08 17:57/eli-c
Nitrogen, Ammonia as N	ND	mg/L		0.1		1	A4500-NH3 G	06/19/08 12:06/jmh
Nitrogen, Nitrate as N	ND	mg/L		0.1		1	E300.0	06/19/08 21:43/jmh
Potassium	14	mg/L		1		1	E200.7	07/07/08 17:57/eli-c
Silica	3.7	mg/L		0.5		1	E200.7	07/07/08 17:57/eli-c
Sodium	2.9	mg/L	D	0.8		1	E200.7	07/07/08 17:57/eli-c
Sulfate	291	mg/L	D	3		50	E300.0	06/19/08 20:54/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	692	umhos/cm		5.0		1	A2510 B	06/19/08 14:49/tb
pH	4.89	s.u.		0.01		1	A4500-H B	06/19/08 12:06/tb
Sodium Adsorption Ratio (SAR)	ND	unitless		0.10		1	Calculation	08/20/08 11:24/ADM
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	450	mg/L		5		1	A2540 C	06/18/08 15:40/mb
Solids, Total Suspended TSS @ 105 C	ND	mg/L		5		1	A2540 D	06/18/08 15:06/mb
<b>METALS - DISSOLVED</b>								
Aluminum	0.4	mg/L		0.1		1	E200.7	07/07/08 17:57/eli-c
Arsenic	ND	mg/L		0.001		1	E200.8	07/17/08 15:57/eli-c
Barium	ND	mg/L		0.1		1	E200.7	07/07/08 17:57/eli-c
Boron	ND	mg/L		0.1		1	E200.7	07/07/08 17:57/eli-c
Cadmium	ND	mg/L		0.005		1	E200.8	07/17/08 15:57/eli-c
Chromium	ND	mg/L		0.01		1	E200.7	07/07/08 17:57/eli-c
Copper	ND	mg/L		0.01		1	E200.7	07/07/08 17:57/eli-c
Iron	ND	mg/L		0.03		1	E200.7	07/07/08 17:57/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/17/08 15:57/eli-c
Manganese	5.20	mg/L		0.01		1	E200.7	07/07/08 17:57/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/17/08 15:57/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.7	07/07/08 17:57/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060316-001  
Client Sample ID: DewBurd SUB04

Report Date: 08/20/08  
Collection Date: 06/17/08 14:00  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED</b>							
Nickel	0.09	mg/L		0.01	1	E200.7	07/07/08 17:57/eli-c
Silver	ND	mg/L		0.005	1	E200.8	07/17/08 15:57/eli-c
Thorium 232	ND	mg/L		0.005	1	E200.8	07/17/08 15:57/eli-c
Uranium	0.0006	mg/L		0.0003	1	E200.8	07/17/08 15:57/eli-c
Vanadium	ND	mg/L		0.1	1	E200.7	07/07/08 17:57/eli-c
Zinc	0.07	mg/L		0.01	1	E200.7	07/07/08 17:57/eli-c
<b>METALS - SUSPENDED</b>							
Thorium 232	ND	mg/L		0.001	1	E200.8	07/17/08 22:12/eli-c
Uranium	ND	mg/L		0.0003	1	E200.8	07/17/08 22:12/eli-c
<b>METALS - TOTAL</b>							
Aluminum	0.5	mg/L		0.1	2	E200.7	07/08/08 22:31/eli-c
Arsenic	ND	mg/L	D	0.002	10	E200.8	07/17/08 06:58/eli-c
Barium	ND	mg/L		0.1	2	E200.7	07/08/08 22:31/eli-c
Boron	ND	mg/L		0.1	2	E200.7	07/08/08 22:31/eli-c
Cadmium	ND	mg/L		0.005	10	E200.8	07/17/08 06:58/eli-c
Chromium	ND	mg/L		0.05	2	E200.7	07/08/08 22:31/eli-c
Chromium, Hexavalent	ND	mg/L		0.005	1	A3500-Cr B	06/18/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01	1	Calculation	08/20/08 00:00/kl
Copper	ND	mg/L		0.01	2	E200.7	07/08/08 22:31/eli-c
Iron	0.18	mg/L		0.03	2	E200.7	07/08/08 22:31/eli-c
Lead	ND	mg/L		0.001	10	E200.8	07/17/08 06:58/eli-c
Manganese	5.18	mg/L		0.01	2	E200.7	07/08/08 22:31/eli-c
Molybdenum	ND	mg/L		0.1	2	E200.7	07/08/08 22:31/eli-c
Nickel	0.10	mg/L		0.05	2	E200.7	07/08/08 22:31/eli-c
Silver	ND	mg/L		0.005	1	E200.8	07/17/08 21:11/eli-c
Thorium 232	ND	mg/L		0.005	10	E200.8	07/17/08 06:58/eli-c
Uranium	0.0007	mg/L		0.0003	10	E200.8	07/17/08 06:58/eli-c
Vanadium	ND	mg/L		0.1	2	E200.7	07/08/08 22:31/eli-c
Zinc	0.06	mg/L		0.01	2	E200.7	07/08/08 22:31/eli-c
Calcium	61.7	mg/L		0.5	2	E200.7	07/08/08 22:31/eli-c
Magnesium	26.8	mg/L		0.5	2	E200.7	07/08/08 22:31/eli-c
Potassium	14.7	mg/L		0.5	2	E200.7	07/08/08 22:31/eli-c
Silica	3.9	mg/L		0.5	2	E200.7	07/08/08 22:31/eli-c
Sodium	3	mg/L	D	1	2	E200.7	07/08/08 22:31/eli-c

METALS - DISSOLVED - SPECIATED

Report	RL - Analyte reporting limit.	MCL - Maximum contaminant level.	Page 2 of 4
Definitions:	QCL - Quality control limit.	ND - Not detected at the reporting limit.	
	MDC - Minimum detectable concentration	D - RL increased due to sample matrix interference.	



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060316-001  
Client Sample ID: DewBurd SUB04

Report Date: 08/20/08  
Collection Date: 06/17/08 14:00  
Date Received: 06/18/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By	
				RL	QCL			
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	ND	mg/L		0.005		1	A3114 B	07/19/08 14:22/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 11:23/eli-c
Selenium-VI	ND	mg/L		0.001		1	A3114 B	07/19/08 14:37/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.001	mg/L		0.001		1	A3114 B	07/22/08 14:42/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/22/08 10:57/eli-c
Selenium-VI	0.001	mg/L		0.001		1	A3114 B	07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	-2.1	pCi/L	U			1	E909.0M	07/18/08 08:20/eli-c
Lead 210 MDC	8.4	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Lead 210 precision (±)	5.0	pCi/L				1	E909.0M	07/18/08 08:20/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	07/09/08 18:40/eli-c
Polonium 210 precision (±)	0.50	pCi/L				1	RMO-3008	07/09/08 18:40/eli-c
Radium 226	3.1	pCi/L				1	E903.0	07/16/08 07:03/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	07/16/08 07:03/eli-c
Radium 226 MDC	0.1	pCi/L				1	E903.0	07/16/08 07:03/eli-c
Thorium 230	0.0	pCi/L	U	0.2		1	E907.0	07/16/08 20:29/eli-c
Thorium 230 precision (±)	0.1	pCi/L				1	E907.0	07/16/08 20:29/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	6.7	pCi/L	U			1	E909.0M	07/14/08 09:30/eli-c
Lead 210 precision (±)	11.9	pCi/L				1	E909.0M	07/14/08 09:30/eli-c
Lead 210 MDC	19.8	pCi/L				1	E909.0M	07/14/08 09:30/eli-c
Polonium 210	0.2	pCi/L	U	1.0		1	RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.37	pCi/L				1	RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.4	pCi/L	U			1	E903.0	07/15/08 14:46/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	07/15/08 14:46/eli-c
Radium 226 MDC	0.5	pCi/L				1	E903.0	07/15/08 14:46/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1	E907.0	07/13/08 18:14/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1	E907.0	07/13/08 18:14/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	3.0	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Alpha precision (±)	1.3	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Alpha MDC	1.8	pCi/L				1	E900.0	07/21/08 22:49/eli-c
Gross Beta	13.0	pCi/L				1	E900.0	07/21/08 22:49/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
U - Not detected at minimum detectable concentration



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060316-001  
**Client Sample ID:** DewBurd SUB04

**Report Date:** 08/20/08  
**Collection Date:** 06/17/08 14:00  
**Date Received:** 06/18/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>RADIONUCLIDES - TOTAL</b>									
Gross Beta precision (±)	1.8	pCi/L					1	E900.0	07/21/08 22:49/eli-c
Gross Beta MDC	2.7	pCi/L					1	E900.0	07/21/08 22:49/eli-c
Gross Gamma	0.0	pCi/L	U	20.0			1	E901.1	06/20/08 16:37/eli-c
Gross Gamma precision (±)	20	pCi/L					1	E901.1	06/20/08 16:37/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	-3	pCi/L	U				1	E909.0M	07/18/08 08:20/eli-c
Lead 210 precision (±)	5	pCi/L					1	E909.0M	07/18/08 08:20/eli-c
Polonium 210	0.4	pCi/L	U	1.0			1	RMO-3008	08/19/08 13:45/eli-c
Polonium 210 precision (±)	0.6	pCi/L					1	RMO-3008	08/19/08 13:45/eli-c
Radium 226	2.7	pCi/L					1	E903.0	08/19/08 13:45/eli-c
Radium 226 precision (±)	0.4	pCi/L					1	E903.0	08/19/08 13:45/eli-c
Thorium 230	0.2	pCi/L	U	0.2			1	E907.0	08/19/08 13:45/eli-c
Thorium 230 precision (±)	0.2	pCi/L					1	E907.0	08/19/08 13:45/eli-c
<b>TOTAL METALS ANALYSES</b>									
Mercury	ND	mg/L		0.0001			1	E245.1	06/30/08 09:02/eli-b
<b>DATA QUALITY</b>									
A/C Balance (± 5)	2.01	%					1	A1030 E	08/20/08 00:00/lkl
Anions	6.13	meq/L					1	A1030 E	08/20/08 00:00/lkl
Cations	6.39	meq/L					1	A1030 E	08/20/08 00:00/lkl
Solids, Total Dissolved Calculated	412	mg/L					1	A1030 E	08/20/08 00:00/lkl
TDS Balance (0.80 - 1.20)	1.08						1	A1030 E	08/20/08 00:00/lkl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.  
 U - Not detected at minimum detectable concentration





**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07090389-003  
**Client Sample ID:** DewBurd SUB06

**Report Date:** 12/26/07  
**Collection Date:** 09/27/07 18:10  
**Date Received:** 09/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	09/28/07 17:00/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	82	mg/L		5		1	A2320 B	10/04/07 17:31/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	10/04/07 17:31/sn
Bicarbonate as HCO3	100	mg/L		5		1	A2320 B	10/04/07 17:31/sn
Calcium	512	mg/L		1		10	E200.7	10/09/07 20:27/eli-c
Chloride	10	mg/L		1		1	E300.0	09/29/07 02:07/jmh
Fluoride	3.7	mg/L		0.1		1	E300.0	09/29/07 02:07/jmh
Magnesium	771	mg/L		1		10	E200.7	10/09/07 20:27/eli-c
Nitrogen, Nitrate as N	0.4	mg/L		0.1		1	E300.0	09/29/07 02:07/jmh
Potassium	27	mg/L		1		1	E200.7	10/09/07 20:23/eli-c
Silica	30	mg/L		1		1	E200.7	10/09/07 20:23/eli-c
Sodium	88	mg/L		1		1	E200.7	10/09/07 20:23/eli-c
Sulfate	5030	mg/L	D	70		100	E300.0	10/02/07 06:47/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	6210	umhos/cm		5		1	A2510 B	10/02/07 18:52/jmh
pH	3.22	s.u.		0.01		1	A4500-H B	10/02/07 18:52/jmh
Solids, Suspended Sediment SSC @ 105 C	10	mg/L		5		1	D3977	10/05/07 08:40/jmh
Solids, Total Dissolved TDS @ 180 C	8100	mg/L		5		1	A2540 C	10/02/07 13:05/sn
Solids, Total Suspended TSS @ 105 C	5	mg/L		5		1	A2540 D	10/04/07 08:31/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	134	mg/L		0.1		50	E200.8	10/09/07 17:45/eli-c
Arsenic	0.003	mg/L		0.001		1	E200.8	10/04/07 19:09/eli-c
Barium	ND	mg/L		0.1		1	E200.8	10/04/07 19:09/eli-c
Boron	0.6	mg/L		0.1		1	E200.7	10/09/07 20:23/eli-c
Cadmium	0.026	mg/L		0.005		1	E200.8	10/04/07 19:09/eli-c
Chromium	ND	mg/L		0.01		50	E200.8	10/09/07 17:45/eli-c
Copper	0.11	mg/L		0.01		1	E200.8	10/04/07 19:09/eli-c
Iron	4.28	mg/L		0.03		1	E200.7	10/09/07 20:23/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	10/04/07 19:09/eli-c
Manganese	223	mg/L		0.01		50	E200.8	10/09/07 17:45/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	10/04/07 19:09/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	10/04/07 19:09/eli-c
Nickel	5.07	mg/L		0.01		1	E200.8	10/04/07 19:09/eli-c
Selenium	0.035	mg/L		0.001		1	E200.8	10/04/07 19:09/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07090389-003  
Client Sample ID: DewBurd SUB06

Report Date: 12/26/07  
Collection Date: 09/27/07 18:10  
Date Received: 09/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By	
				RL	QCL			
<b>METALS - DISSOLVED</b>								
Silver	ND	mg/L		0.005		1	E200.8	10/04/07 19:09/eli-c
Thorium 232	0.011	mg/L		0.005		1	E200.8	10/04/07 19:09/eli-c
Uranium	5.29	mg/L		0.0003		1	E200.8	10/04/07 19:09/eli-c
Vanadium	ND	mg/L		0.1		50	E200.8	10/09/07 17:45/eli-c
Zinc	4.31	mg/L		0.01		1	E200.8	10/04/07 19:09/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		25	E200.8	10/09/07 03:32/eli-c
Uranium	0.0013	mg/L		0.0003		25	E200.8	10/09/07 03:32/eli-c
<b>METALS - TOTAL</b>								
Aluminum	160	mg/L		0.1		25	E200.8	10/08/07 23:39/eli-c
Arsenic	ND	mg/L	D	0.003		25	E200.8	10/08/07 23:39/eli-c
Barium	ND	mg/L		0.1		25	E200.8	10/08/07 23:39/eli-c
Boron	0.7	mg/L		0.1		1	E200.7	10/08/07 16:26/eli-c
Cadmium	0.03	mg/L	D	0.01		25	E200.8	10/08/07 23:39/eli-c
Chromium	ND	mg/L		0.05		25	E200.8	10/08/07 23:39/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.05		10	A3500-Cr B	09/28/07 09:00/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	12/10/07 16:40/eli-c
Copper	0.14	mg/L		0.01		25	E200.8	10/08/07 23:39/eli-c
Iron	4.66	mg/L		0.03		1	E200.7	10/08/07 16:26/eli-c
Lead	ND	mg/L	D	0.003		25	E200.8	10/08/07 23:39/eli-c
Manganese	215	mg/L		0.01		50	E200.8	10/11/07 08:22/eli-c
Mercury	ND	mg/L		0.001		25	E200.8	10/08/07 23:39/eli-c
Molybdenum	ND	mg/L		0.1		25	E200.8	10/08/07 23:39/eli-c
Nickel	6.53	mg/L		0.05		25	E200.8	10/08/07 23:39/eli-c
Silver	ND	mg/L		0.005		25	E200.8	10/08/07 23:39/eli-c
Thorium 232	0.010	mg/L		0.005		25	E200.8	10/08/07 23:39/eli-c
Uranium	7.38	mg/L	D	0.001		25	E200.8	10/08/07 23:39/eli-c
Vanadium	ND	mg/L		0.1		25	E200.8	10/08/07 23:39/eli-c
Zinc	5.55	mg/L		0.01		1	E200.7	10/08/07 16:26/eli-c
- D=Detection limit raised due to matrix interference.								
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.013	mg/L		0.001		1	A3114 B	10/08/07 16:09/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	10/10/07 10:29/eli-c
Selenium-VI	0.013	mg/L		0.001		1	A3114 B	10/11/07 11:00/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
 Project: Edgemont  
 Lab ID: R07090389-003  
 Client Sample ID: DewBurd SUB06

Report Date: 12/26/07  
 Collection Date: 09/27/07 18:10  
 Date Received: 09/28/07  
 Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - DISSOLVED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/26/07 09:00/eli-c
Polonium 210	ND	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	4.3	pCi/L		0.2		1	E903.0	10/30/07 13:35/eli-c
Radium 226 precision (±)	1.5	pCi/L				1	E903.0	10/30/07 13:35/eli-c
Thorium 230	23.8	pCi/L		0.2		1	E907.0	10/29/07 15:00/eli-c
Thorium 230 precision (±)	4.6	pCi/L				1	E907.0	10/29/07 15:00/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Lead 210	ND	pCi/L		1.0		1	E909.0M	10/24/07 07:00/eli-c
Polonium 210	4.5	pCi/L		1.0		1	RMO-3008	10/30/07 14:00/eli-c
Polonium 210 precision (±)	3.9	pCi/L				1	RMO-3008	10/30/07 14:00/eli-c
Radium 226	ND	pCi/L		0.2		1	E903.0	10/30/07 13:34/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	10/26/07 10:00/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	3070	pCi/L		1.0		1	E900.0	10/14/07 01:13/eli-c
Gross Alpha precision (±)	33.5	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Beta	2500	pCi/L		2.0		1	E900.0	10/14/07 01:13/eli-c
Gross Beta precision (±)	36.5	pCi/L				1	E900.0	10/14/07 01:13/eli-c
Gross Gamma	ND	pCi/L		20.0		1	E901.1	10/04/07 15:30/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	2.82	%				1	A1030 E	12/10/07 19:02/eli-c
Anions	119	meq/L				1	A1030 E	12/10/07 19:02/eli-c
Cations	126	meq/L				1	A1030 E	12/10/07 19:02/eli-c
Solids, Total Dissolved Calculated	7090	mg/L				1	A1030 E	12/10/07 19:02/eli-c
TDS Balance (0.80 - 1.20)	1.14	dec. %				1	A1030 E	12/10/07 19:02/eli-c

- Ion balance achieved using Sulfate data from E200.7.

Report RL - Analyte reporting limit.  
 Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110302-002  
Client Sample ID: DewBurdSub06

Report Date: 01/30/08  
Collection Date: 11/27/07 09:36  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>MICROBIOLOGICAL</b>							
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2	2	A9222 D	11/28/07 10:00/jmh
<b>MAJOR IONS</b>							
Alkalinity, Total as CaCO3	ND	mg/L		5	1	A2320 B	12/11/07 18:02/sn
Carbonate as CO3	ND	mg/L		5	1	A2320 B	12/11/07 18:02/sn
Bicarbonate as HCO3	ND	mg/L		5	1	A2320 B	12/11/07 18:02/sn
Calcium	471	mg/L	D	1	10	E200.7	12/19/07 15:21/eli-c
Chloride	7	mg/L		1	1	E300.0	11/29/07 01:39/jmh
Fluoride	5.5	mg/L		0.1	1	E300.0	11/29/07 01:39/jmh
Magnesium	707	mg/L		0.5	10	E200.7	12/19/07 15:21/eli-c
Nitrogen, Ammonia as N	3.4	mg/L	D	0.2	10	A4500-NH3 G	12/04/07 16:03/sn
Nitrogen, Nitrate as N	0.4	mg/L		0.1	1	E300.0	11/29/07 01:39/jmh
Potassium	29	mg/L		1	1	E200.7	12/19/07 16:59/eli-c
Silica	34.1	mg/L		0.5	10	E200.7	12/19/07 15:21/eli-c
Sodium	86.1	mg/L	D	0.8	1	E200.7	12/19/07 16:59/eli-c
Sulfate	5700	mg/L	D	40	50	E300.0	11/29/07 00:51/jmh
<b>PHYSICAL PROPERTIES</b>							
Conductivity @ 25 C	6390	umhos/cm		5.0	1	A2510 B	12/02/07 13:23/jmh
pH	3.20	s.u.		0.01	1	A4500-H B	12/02/07 13:44/jmh
Sodium Adsorption Ratio (SAR)	0.59	meq/L		0.10	1	Calculation	01/16/08 18:29/sec
Solids, Suspended Sediment SSC @ 105 C	ND	mg/L		5	1	D3977	12/04/07 15:17/jmh
Solids, Total Dissolved TDS @ 180 C	8600	mg/L		5	1	A2540 C	12/03/07 13:36/jmh
Solids, Total Suspended TSS @ 105 C	5	mg/L		5	1	A2540 D	12/03/07 12:18/jmh
<b>METALS - DISSOLVED</b>							
Aluminum	131	mg/L		0.1	10	E200.8	12/08/07 00:20/eli-c
Arsenic	0.004	mg/L		0.001	1	E200.8	01/07/08 21:17/eli-c
Barium	ND	mg/L		0.1	10	E200.8	12/08/07 00:20/eli-c
Boron	ND	mg/L		0.1	1	E200.7	12/19/07 16:59/eli-c
Cadmium	0.026	mg/L		0.005	1	E200.8	01/07/08 21:17/eli-c
Chromium	ND	mg/L		0.01	10	E200.8	12/08/07 00:20/eli-c
Copper	0.10	mg/L		0.01	1	E200.8	01/07/08 21:17/eli-c
Iron	5.74	mg/L		0.03	1	E200.7	12/19/07 16:59/eli-c
Lead	0.001	mg/L		0.001	10	E200.8	12/08/07 00:20/eli-c
Manganese	249	mg/L		0.01	10	E200.7	12/19/07 15:21/eli-c
Mercury	ND	mg/L		0.001	10	E200.8	12/08/07 00:20/eli-c
Molybdenum	ND	mg/L		0.1	10	E200.8	12/08/07 00:20/eli-c

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 5 of 15

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110302-002  
Client Sample ID: DewBurdSub06

Report Date: 01/30/08  
Collection Date: 11/27/07 09:36  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - DISSOLVED</b>									
Nickel	5.58	mg/L		0.01			10	E200.8	12/08/07 00:20/eli-c
Silver	ND	mg/L		0.005			10	E200.8	12/08/07 00:20/eli-c
Thorium 232	0.010	mg/L		0.005			10	E200.8	12/08/07 00:20/eli-c
Uranium	5.84	mg/L		0.0003			1	E200.8	01/07/08 21:17/eli-c
Vanadium	ND	mg/L		0.1			10	E200.8	12/08/07 00:20/eli-c
Zinc	4.45	mg/L		0.01			1	E200.8	01/07/08 21:17/eli-c
<b>METALS - SUSPENDED</b>									
Thorium 232	ND	mg/L		0.001			1	E200.8	12/13/07 20:43/eli-c
Uranium	0.0013	mg/L		0.0003			1	E200.8	12/13/07 20:43/eli-c
<b>METALS - TOTAL</b>									
Aluminum	ND	mg/L		0.1			1	E200.8	12/29/07 03:55/eli-c
Arsenic	0.003	mg/L		0.001			1	E200.8	01/07/08 21:24/eli-c
Barium	ND	mg/L		0.1			1	E200.8	12/29/07 03:55/eli-c
Boron	ND	mg/L		0.1			1	E200.7	01/02/08 18:54/eli-c
Cadmium	0.027	mg/L		0.005			1	E200.8	01/07/08 21:24/eli-c
Chromium	ND	mg/L		0.05			1	E200.8	12/29/07 03:55/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.02			5	A3500-Cr B	11/28/07 15:40/sn
Chromium, Trivalent	ND	mg/L		0.01			1	Calculation	01/16/08 18:32/sec
Copper	0.10	mg/L		0.01			1	E200.8	01/07/08 21:24/eli-c
Iron	5.93	mg/L		0.03			1	E200.7	01/02/08 18:54/eli-c
Lead	0.001	mg/L		0.001			1	E200.8	12/29/07 03:55/eli-c
Manganese	246	mg/L		0.01			10	E200.7	01/02/08 15:41/eli-c
Mercury	ND	mg/L		0.001			1	E200.8	12/29/07 03:55/eli-c
Molybdenum	ND	mg/L		0.1			1	E200.8	12/29/07 03:55/eli-c
Nickel	ND	mg/L		0.05			1	E200.8	12/29/07 03:55/eli-c
Silver	ND	mg/L		0.005			1	E200.8	12/29/07 03:55/eli-c
Thorium 232	0.010	mg/L		0.005			1	E200.8	12/29/07 03:55/eli-c
Uranium	5.83	mg/L		0.0003			1	E200.8	01/07/08 21:24/eli-c
Vanadium	ND	mg/L		0.1			1	E200.8	12/29/07 03:55/eli-c
Zinc	4.46	mg/L		0.01			1	E200.8	01/07/08 21:24/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>									
Selenium	0.014	mg/L		0.001			1	A3114 B	12/30/07 10:28/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	12/29/07 09:36/eli-c
Selenium-VI	0.014	mg/L		0.001			1	A3114 B	12/30/07 11:58/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Page 6 of 15



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R07110302-002  
Client Sample ID: DewBurdSub06

Report Date: 01/30/08  
Collection Date: 11/27/07 09:36  
Date Received: 11/28/07  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By	
					QCL	DF			
<b>METALS - TOTAL - SPECIATED</b>									
Selenium	0.013	mg/L		0.001			1	A3114 B	12/30/07 11:03/eli-c
Selenium-IV	ND	mg/L		0.001			1	A3114 B	12/29/07 10:22/eli-c
Selenium-VI	0.013	mg/L		0.001			1	A3114 B	12/30/07 11:58/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	12/10/07 07:15/eli-c
Polonium 210	1.7	pCi/L		1.0			1	RMO-3008	12/10/07 12:00/eli-c
Polonium 210 precision (±)	1.6	pCi/L					1	RMO-3008	12/10/07 12:00/eli-c
Radium 226	2.0	pCi/L		0.2			1	E903.0	12/18/07 02:54/eli-c
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	12/18/07 02:54/eli-c
Thorium 230	27.8	pCi/L		0.2			1	E907.0	12/27/07 15:15/eli-c
Thorium 230 precision (±)	9.7	pCi/L					1	E907.0	12/27/07 15:15/eli-c
- Th230 was analyzed on two separate aliquots with low tracer recoveries; this poor response is matrix related.									
<b>RADIONUCLIDES - SUSPENDED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	12/13/07 08:00/eli-c
Polonium 210	1.4	pCi/L		1.0			1	RMO-3008	12/18/07 12:00/eli-c
Polonium 210 precision (±)	1.3	pCi/L					1	RMO-3008	12/18/07 12:00/eli-c
Radium 226	ND	pCi/L		0.2			1	E903.0	12/19/07 11:19/eli-c
Thorium 230	1	pCi/L		0.2			1	E907.0	12/12/07 16:10/eli-c
Thorium 230 precision (±)	0.6	pCi/L					1	E907.0	12/12/07 16:10/eli-c
<b>RADIONUCLIDES - TOTAL</b>									
Gross Alpha	6780	pCi/L		1.0			1	E900.0	12/30/07 04:12/eli-c
Gross Alpha precision (±)	47.0	pCi/L					1	E900.0	12/30/07 04:12/eli-c
Gross Beta	3200	pCi/L		2.0			1	E900.0	12/30/07 04:12/eli-c
Gross Beta precision (±)	42.3	pCi/L					1	E900.0	12/30/07 04:12/eli-c
Gross Gamma	264	pCi/L		20.0			1	E901.1	12/05/07 10:50/eli-c
Gross Gamma precision (±)	88.5	pCi/L					1	E901.1	12/05/07 10:50/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>									
Lead 210	ND	pCi/L		1.0			1	E909.0M	01/05/08 14:23/sec
Polonium 210	3.1	pCi/L		1.0			1	RMO-3008	01/05/08 14:23/sec
Polonium 210 precision (±)	2.1	pCi/L					1	RMO-3008	01/05/08 14:23/sec
Radium 226	2.0	pCi/L		0.2			1	E903.0	01/05/08 14:23/sec
Radium 226 precision (±)	0.5	pCi/L					1	E903.0	01/05/08 14:23/sec
Thorium 230	28.8	pCi/L		0.2			1	E907.0	01/05/08 14:23/sec
Thorium 230 precision (±)	9.7	pCi/L					1	E907.0	01/05/08 14:23/sec

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

### LABORATORY ANALYTICAL REPORT

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R07110302-002  
**Client Sample ID:** DewBurdSub06

**Report Date:** 01/30/08  
**Collection Date:** 11/27/07 09:36  
**Date Received:** 11/28/07  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-0.00889	%				1	A1030 E	01/17/08 13:51/sec
Anions	119	meq/L				1	A1030 E	01/17/08 13:51/sec
Cations	119	meq/L				1	A1030 E	01/17/08 13:51/sec
Solids, Total Dissolved Calculated	7020	mg/L				1	A1030 E	01/17/08 13:51/sec
TDS Balance (0.80 - 1.20)	1.23	dec. %				1	A1030 E	01/17/08 13:51/sec

- TDS balance may have been adversely affected by hydratable solids (Sodium and Magnesium Sulfates).

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Page 8 of 15



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020083-002  
**Client Sample ID:** DewBurd Sub06

**Report Date:** 04/30/08  
**Collection Date:** 02/10/08 16:10  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	02/11/08 13:40/jmh
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	02/21/08 16:33/sn
Carbonate as CO3	ND	mg/L		5		1	A2320 B	02/21/08 16:33/sn
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	02/21/08 16:33/sn
Calcium	534	mg/L	D	1		10	E200.7	02/27/08 19:00/eli-c
Chloride	10	mg/L		1		1	E300.0	02/12/08 20:23/sn
Fluoride	7.4	mg/L		0.1		1	E300.0	02/12/08 20:23/sn
Magnesium	878	mg/L		0.5		10	E200.7	02/27/08 19:00/eli-c
Nitrogen, Ammonia as N	4.5	mg/L	D	0.1		10	A4500-NH3 G	02/11/08 18:16/sn
Nitrogen, Nitrate as N	0.4	mg/L		0.1		1	E300.0	02/12/08 20:23/sn
Potassium	35	mg/L		1		1	E200.7	02/27/08 21:18/eli-c
Silica	37.2	mg/L		0.5		1	E200.7	02/27/08 21:18/eli-c
Sodium	113	mg/L	D	0.8		1	E200.7	02/27/08 21:18/eli-c
Sulfate	7330	mg/L	D	7		100	E300.0	02/14/08 17:14/sn
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	7640	umhos/cm		5.0		1	A2510 B	02/16/08 15:27/jmh
pH	3.19	s.u.		0.01		1	A4500-H B	02/16/08 15:00/jmh
Sodium Adsorption Ratio (SAR)	0.70	unitless		0.10		1	Calculation	04/15/08 00:00/kl
Solids, Suspended Sediment SSC @ 105 C	14	mg/L		5		1	D3977	02/20/08 16:28/jmh
Solids, Total Dissolved TDS @ 180 C	6800	mg/L		5		1	A2540 C	02/11/08 14:58/jmh
Solids, Total Suspended TSS @ 105 C	10	mg/L		5		1	A2540 D	02/15/08 11:01/jmh
<b>METALS - DISSOLVED</b>								
Aluminum	162	mg/L		0.1		10	E200.7	02/27/08 19:00/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	02/21/08 21:32/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 21:32/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 21:18/eli-c
Cadmium	0.036	mg/L		0.005		1	E200.8	02/21/08 21:32/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 21:32/eli-c
Copper	0.13	mg/L		0.01		1	E200.8	02/21/08 21:32/eli-c
Iron	7.35	mg/L		0.03		1	E200.7	02/27/08 21:18/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	02/21/08 21:32/eli-c
Manganese	299	mg/L		0.01		10	E200.7	02/27/08 19:00/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/21/08 21:32/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/21/08 21:32/eli-c

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 4 of 11



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020083-002  
**Client Sample ID:** DewBurd Sub06

**Report Date:** 04/30/08  
**Collection Date:** 02/10/08 16:10  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Nickel	6.45	mg/L		0.05		1	E200.8	02/21/08 21:32/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/22/08 17:51/eli-c
Thorium 232	0.013	mg/L		0.005		1	E200.8	02/21/08 21:32/eli-c
Uranium	7.84	mg/L		0.0003		1	E200.8	02/21/08 21:32/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/21/08 21:32/eli-c
Zinc	6.58	mg/L		0.01		1	E200.7	02/27/08 21:18/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	02/21/08 23:31/eli-c
Uranium	0.0019	mg/L		0.0003		1	E200.8	02/21/08 23:31/eli-c
<b>METALS - TOTAL</b>								
Aluminum	166	mg/L		0.1		10	E200.8	02/21/08 21:24/eli-c
Arsenic	0.004	mg/L		0.001		1	E200.8	02/21/08 05:53/eli-c
Barium	ND	mg/L		0.1		1	E200.8	02/21/08 05:53/eli-c
Boron	ND	mg/L		0.1		1	E200.7	02/27/08 21:28/eli-c
Cadmium	0.031	mg/L		0.005		1	E200.8	02/21/08 05:53/eli-c
Chromium	ND	mg/L		0.05		1	E200.8	02/21/08 05:53/eli-c
Chromium, Hexavalent	ND	mg/L	D	0.01		2	A3500-Cr B	02/11/08 16:18/sn
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	04/15/08 00:00/kl
Copper	0.13	mg/L		0.01		1	E200.8	02/21/08 05:53/eli-c
Iron	8.22	mg/L		0.03		1	E200.7	02/27/08 21:28/eli-c
Lead	0.001	mg/L		0.001		1	E200.8	02/21/08 05:53/eli-c
Manganese	317	mg/L		0.01		10	E200.7	02/27/08 19:29/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	02/21/08 05:53/eli-c
Molybdenum	ND	mg/L		0.1		1	E200.8	02/21/08 05:53/eli-c
Nickel	6.14	mg/L		0.05		1	E200.8	02/21/08 05:53/eli-c
Silver	ND	mg/L		0.005		1	E200.8	02/21/08 05:53/eli-c
Thorium 232	0.013	mg/L		0.005		1	E200.8	02/21/08 05:53/eli-c
Uranium	6.73	mg/L	D	0.0005		1	E200.8	02/21/08 05:53/eli-c
Vanadium	ND	mg/L		0.1		1	E200.8	02/21/08 05:53/eli-c
Zinc	7.22	mg/L	D	0.02		10	E200.8	02/21/08 21:24/eli-c
Calcium	571	mg/L	D	0.8		10	E200.7	02/27/08 19:29/eli-c
Magnesium	930	mg/L	D	0.8		10	E200.7	02/27/08 19:29/eli-c
Potassium	37.1	mg/L		0.5		1	E200.7	02/27/08 21:28/eli-c
Silica	41.5	mg/L		0.1		1	E200.7	02/27/08 21:28/eli-c
Sodium	115	mg/L		0.5		1	E200.7	02/27/08 21:28/eli-c

**Report** RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Page 5 of 11

**Definitions:** QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020083-002  
**Client Sample ID:** DewBurd Sub06

**Report Date:** 04/30/08  
**Collection Date:** 02/10/08 16:10  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.017	mg/L		0.001		1	A3114 B	02/19/08 12:05/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/19/08 10:16/eli-c
Selenium-VI	0.002	mg/L		0.001		1	A3114 B	02/19/08 12:26/eli-c
<b>METALS - TOTAL - SPECIATED</b>								
Selenium	0.016	mg/L		0.001		1	A3114 B	02/19/08 17:21/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	02/19/08 15:33/eli-c
Selenium-VI	0.016	mg/L		0.001		1	A3114 B	02/19/08 17:37/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>								
Radium 226	2.2	pCi/L		0.2		1	E903.0	03/03/08 11:48/eli-c
Thorium 230	25.2	pCi/L		0.2		1	E907.0	02/22/08 14:15/eli-c
Thorium 230 precision (±)	0.3	pCi/L				1	E907.0	02/22/08 14:15/eli-c
Radium 226 precision (±)	0.3	pCi/L				1	E903.0	03/03/08 11:48/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>								
Radium 226	1.0	pCi/L		0.2		1	E903.0	02/25/08 13:00/eli-c
Radium 226 precision (±)	0.6	pCi/L				1	E903.0	02/25/08 13:00/eli-c
Thorium 230	ND	pCi/L		0.2		1	E907.0	02/21/08 16:15/eli-c
<b>RADIONUCLIDES - TOTAL</b>								
Gross Alpha	8750	pCi/L		1.0		1	E900.0	02/29/08 03:49/eli-c
Gross Alpha precision (±)	43.6	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Gross Beta	3600	pCi/L		2.0		1	E900.0	02/29/08 03:49/eli-c
Gross Beta precision (±)	45.5	pCi/L				1	E900.0	02/29/08 03:49/eli-c
Gross Gamma	675	pCi/L		20.0		1	E901.1	02/19/08 08:48/eli-c
Gross Gamma precision (±)	192	pCi/L				1	E901.1	02/19/08 08:48/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Radium 226	1.8	pCi/L		0.2		1	E903.0	03/04/08 18:25/eli-c
Radium 226 precision (±)	0.2	pCi/L				1	E903.0	03/04/08 18:25/eli-c
Thorium 230	31.1	pCi/L		0.2		1	E907.0	02/29/08 11:45/eli-c
Thorium 230 precision (±)	0.9	pCi/L				1	E907.0	02/29/08 11:45/eli-c
<b>DATA QUALITY</b>								
A/C Balance (± 5)	-2.74					1	A1030 E	04/15/08 00:00/kl
Anions	154	meq/L				1	A1030 E	04/15/08 00:00/kl
Cations	145	meq/L				1	A1030 E	04/15/08 00:00/kl

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08020083-002  
**Client Sample ID:** DewBurd Sub06

**Report Date:** 04/30/08  
**Collection Date:** 02/10/08 16:10  
**Date Received:** 02/11/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>DATA QUALITY</b>								
Solids, Total Dissolved Calculated	8910	mg/L				1	A1030 E	04/15/08 00:00/IKI
TDS Balance (0.80 - 1.20)	0.770					1	A1030 E	04/15/08 00:00/IKI

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.

Page 7 of 11



**LABORATORY ANALYTICAL REPORT**

**Client:** RESPEC Inc  
**Project:** Edgemont  
**Lab ID:** R08060403-003  
**Client Sample ID:** DewBurd SUB06

**Report Date:** 08/21/08  
**Collection Date:** 06/23/08 13:45  
**Date Received:** 06/24/08  
**Matrix:** AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>MICROBIOLOGICAL</b>								
Bacteria, Fecal Coliform	ND	CFU/100ml	D	2		2	A9222 D	06/24/08 11:05/tb
<b>MAJOR IONS</b>								
Alkalinity, Total as CaCO3	ND	mg/L		5		1	A2320 B	06/25/08 11:30/mb
Carbonate as CO3	ND	mg/L		5		1	A2320 B	06/25/08 11:30/mb
Bicarbonate as HCO3	ND	mg/L		5		1	A2320 B	06/25/08 11:30/mb
Calcium	328	mg/L		0.5		2	E200.7	07/01/08 22:19/eli-c
Chloride	5	mg/L		1		1	E300.0	06/25/08 12:57/jmh
Fluoride	3.9	mg/L		0.1		1	E300.0	06/25/08 12:57/jmh
Magnesium	436	mg/L		0.5		2	E200.7	07/01/08 22:19/eli-c
Nitrogen, Ammonia as N	2.0	mg/L		0.1		2	A4500-NH3 G	06/25/08 16:28/ch
Nitrogen, Nitrate as N	0.6	mg/L		0.1		1	E300.0	06/25/08 12:57/jmh
Potassium	17	mg/L		1		2	E200.7	07/01/08 22:19/eli-c
Silica	10.2	mg/L		0.5		2	E200.7	07/01/08 22:19/eli-c
Sodium	52	mg/L	D	2		2	E200.7	07/01/08 22:19/eli-c
Sulfate	3180	mg/L	D	3		50	E300.0	06/25/08 12:40/jmh
<b>PHYSICAL PROPERTIES</b>								
Conductivity @ 25 C	4110	umhos/cm		5.0		1	A2510 B	06/25/08 14:31/tb
pH	3.52	s.u.		0.01		1	A4500-H B	06/25/08 13:59/tb
Sodium Adsorption Ratio (SAR)	0.44	unitless		0.10		1	Calculation	08/21/08 15:16/ADM
Solids, Suspended Sediment SSC @ 105 C	8	mg/L		5		1	D3977	06/27/08 00:00/mb
Solids, Total Dissolved TDS @ 180 C	4500	mg/L		5		1	A2540 C	06/27/08 11:46/mb
Solids, Total Suspended TSS @ 105 C	14	mg/L		5		1	A2540 D	06/27/08 17:07/mb
<b>METALS - DISSOLVED</b>								
Aluminum	64.4	mg/L		0.1		2	E200.7	07/01/08 22:19/eli-c
Arsenic	0.002	mg/L		0.001		1	E200.8	07/07/08 15:44/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/01/08 22:19/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/01/08 22:19/eli-c
Cadmium	0.015	mg/L		0.005		1	E200.8	07/07/08 15:44/eli-c
Chromium	0.01	mg/L		0.01		2	E200.7	07/01/08 22:19/eli-c
Copper	0.07	mg/L		0.01		2	E200.7	07/01/08 22:19/eli-c
Iron	1.88	mg/L		0.03		2	E200.7	07/01/08 22:19/eli-c
Lead	ND	mg/L		0.001		1	E200.8	07/07/08 15:44/eli-c
Manganese	133	mg/L		0.01		20	E200.7	07/15/08 12:04/eli-c
Mercury	ND	mg/L		0.001		1	E200.8	07/07/08 15:44/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/01/08 22:19/eli-c
Nickel	3.01	mg/L		0.01		2	E200.7	07/01/08 22:19/eli-c

**Report** RL - Analyte reporting limit.

**Definitions:** QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.

Page 9 of 24





POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060403-003  
Client Sample ID: DewBurd SUB06

Report Date: 08/21/08  
Collection Date: 06/23/08 13:45  
Date Received: 06/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/		Method	Analysis Date / By
					QCL	DF		
<b>METALS - DISSOLVED</b>								
Silver	ND	mg/L		0.005		1	E200.8	07/07/08 15:44/eli-c
Thorium 232	ND	mg/L		0.005		1	E200.8	07/07/08 15:44/eli-c
Uranium	3.22	mg/L		0.0003		1	E200.8	07/07/08 15:44/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/01/08 22:19/eli-c
Zinc	2.99	mg/L		0.01		2	E200.7	07/01/08 22:19/eli-c
<b>METALS - SUSPENDED</b>								
Thorium 232	ND	mg/L		0.001		1	E200.8	07/11/08 15:43/eli-c
Uranium	0.0015	mg/L		0.0003		1	E200.8	07/11/08 15:43/eli-c
<b>METALS - TOTAL</b>								
Aluminum	62.8	mg/L		0.1		2	E200.7	07/08/08 00:27/eli-c
Arsenic	0.002	mg/L		0.001		10	E200.8	07/07/08 18:06/eli-c
Barium	ND	mg/L		0.1		2	E200.7	07/08/08 00:27/eli-c
Boron	0.2	mg/L		0.1		2	E200.7	07/08/08 00:27/eli-c
Cadmium	0.019	mg/L		0.005		10	E200.8	07/07/08 18:06/eli-c
Chromium	ND	mg/L		0.05		2	E200.7	07/08/08 00:27/eli-c
Chromium, Hexavalent	ND	mg/L		0.005		1	A3500-Cr B	06/24/08 00:00/mb
Chromium, Trivalent	ND	mg/L		0.01		1	Calculation	08/21/08 00:00/kl
Copper	0.06	mg/L		0.01		2	E200.7	07/08/08 00:27/eli-c
Iron	2.19	mg/L		0.03		2	E200.7	07/08/08 00:27/eli-c
Lead	0.011	mg/L	D	0.007		10	E200.8	07/07/08 18:06/eli-c
Manganese	0.06	mg/L		0.01		1	E200.8	07/11/08 18:38/eli-c
Molybdenum	ND	mg/L		0.1		2	E200.7	07/08/08 00:27/eli-c
Nickel	3.03	mg/L		0.05		2	E200.7	07/08/08 00:27/eli-c
Silver	ND	mg/L		0.005		10	E200.8	07/07/08 18:06/eli-c
Thorium 232	0.005	mg/L		0.005		10	E200.8	07/07/08 18:06/eli-c
Uranium	3.61	mg/L		0.0003		10	E200.8	07/07/08 18:06/eli-c
Vanadium	ND	mg/L		0.1		2	E200.7	07/08/08 00:27/eli-c
Zinc	2.92	mg/L		0.01		2	E200.7	07/08/08 00:27/eli-c
Calcium	330	mg/L		0.5		2	E200.7	07/08/08 00:27/eli-c
Magnesium	439	mg/L		0.5		2	E200.7	07/08/08 00:27/eli-c
Potassium	17.7	mg/L		0.5		2	E200.7	07/08/08 00:27/eli-c
Silica	11.4	mg/L		0.5		2	E200.7	07/08/08 00:27/eli-c
Sodium	54	mg/L	D	1		2	E200.7	07/08/08 00:27/eli-c
<b>METALS - DISSOLVED - SPECIATED</b>								
Selenium	0.009	mg/L		0.005		1	A3114 B	07/19/08 15:58/eli-c
Selenium-IV	ND	mg/L		0.001		1	A3114 B	07/19/08 13:00/eli-c

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.  
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
D - RL increased due to sample matrix interference.



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060403-003  
Client Sample ID: DewBurd SUB06

Report Date: 08/21/08  
Collection Date: 06/23/08 13:45  
Date Received: 06/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>METALS - DISSOLVED - SPECIATED</b>							
Selenium-VI	0.009	mg/L		0.001		1 A3114 B	07/19/08 14:40/eli-c
<b>METALS - TOTAL - SPECIATED</b>							
Selenium	0.008	mg/L		0.001		1 A3114 B	07/22/08 15:18/eli-c
Selenium-IV	ND	mg/L		0.001		1 A3114 B	07/22/08 11:38/eli-c
Selenium-VI	0.008	mg/L		0.001		1 A3114 B	07/22/08 15:44/eli-c
<b>RADIONUCLIDES - DISSOLVED</b>							
Lead 210	-0.6	pCi/L	U			1 E909.0M	07/10/08 10:10/eli-c
Lead 210 MDC	9.0	pCi/L				1 E909.0M	07/10/08 10:10/eli-c
Lead 210 precision (±)	5.3	pCi/L				1 E909.0M	07/10/08 10:10/eli-c
Polonium 210	0.3	pCi/L	U	1.0		1 RMO-3008	07/10/08 21:30/eli-c
Polonium 210 precision (±)	0.60	pCi/L				1 RMO-3008	07/10/08 21:30/eli-c
Radium 226	2.2	pCi/L				1 E903.0	07/09/08 09:54/eli-c
Radium 226 precision (±)	0.3	pCi/L				1 E903.0	07/09/08 09:54/eli-c
Radium 226 MDC	0.2	pCi/L				1 E903.0	07/09/08 09:54/eli-c
Thorium 230	6.3	pCi/L		0.2		1 E907.0	07/24/08 15:44/eli-c
Thorium 230 precision (±)	2.0	pCi/L				1 E907.0	07/24/08 15:44/eli-c
<b>RADIONUCLIDES - SUSPENDED</b>							
Lead 210	3.7	pCi/L	U			1 E909.0M	07/08/08 06:20/eli-c
Lead 210 precision (±)	4.4	pCi/L				1 E909.0M	07/08/08 06:20/eli-c
Lead 210 MDC	7.4	pCi/L				1 E909.0M	07/08/08 06:20/eli-c
Polonium 210	0.4	pCi/L	U	1.0		1 RMO-3008	08/18/08 17:00/eli-c
Polonium 210 precision (±)	0.40	pCi/L				1 RMO-3008	08/18/08 17:00/eli-c
Radium 226	-0.2	pCi/L	U			1 E903.0	07/15/08 23:30/eli-c
Radium 226 precision (±)	0.2	pCi/L				1 E903.0	07/15/08 23:30/eli-c
Radium 226 MDC	0.4	pCi/L				1 E903.0	07/15/08 23:30/eli-c
Thorium 230	0.2	pCi/L	U	0.2		1 E907.0	07/10/08 19:50/eli-c
Thorium 230 precision (±)	0.2	pCi/L				1 E907.0	07/10/08 19:50/eli-c
<b>RADIONUCLIDES - TOTAL</b>							
Gross Alpha	3570	pCi/L				1 E900.0	07/19/08 01:30/eli-c
Gross Alpha precision (±)	82.4	pCi/L				1 E900.0	07/19/08 01:30/eli-c
Gross Alpha MDC	16.6	pCi/L				1 E900.0	07/19/08 01:30/eli-c
Gross Beta	1200	pCi/L				1 E900.0	07/19/08 01:30/eli-c
Gross Beta precision (±)	24.5	pCi/L				1 E900.0	07/19/08 01:30/eli-c
Gross Beta MDC	17.5	pCi/L				1 E900.0	07/19/08 01:30/eli-c
Gross Gamma	0.0	pCi/L	U	20.0		1 E901.1	07/14/08 11:00/eli-c

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

Page 11 of 24



POWERTECH (USA) INC.



ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702 • www.energylab.com  
Toll Free 888.672.1225 • Voice 605.342.1225 • Fax 605.342.1397 • rapid\_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: RESPEC Inc  
Project: Edgemont  
Lab ID: R08060403-003  
Client Sample ID: DewBurd SUB06

Report Date: 08/21/08  
Collection Date: 06/23/08 13:45  
Date Received: 06/24/08  
Matrix: AQUEOUS

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
<b>RADIONUCLIDES - TOTAL</b>								
Gross Gamma precision (±)	20	pCi/L				1	E901.1	07/14/08 11:00/eli-c
<b>RADIONUCLIDES - TOTAL - CALCULATED</b>								
Lead 210	3.1	pCi/L	U	1.0		1	E909.0M	08/21/08 13:47/eli-c
Lead 210 precision (±)	6.9	pCi/L				1	E909.0M	08/21/08 13:47/eli-c
Polonium 210	0.7	pCi/L	U	1.0		1	RMO-3008	08/21/08 13:47/eli-c
Polonium 210 precision (±)	0.72	pCi/L				1	RMO-3008	08/21/08 13:47/eli-c
Radium 226	2.0	pCi/L		0.2		1	E903.0	08/21/08 13:47/eli-c
Radium 226 precision (±)	0.4	pCi/L				1	E903.0	08/21/08 13:47/eli-c
Thorium 230	6.5	pCi/L		0.2		1	E907.0	08/21/08 13:47/eli-c
Thorium 230 precision (±)	2.0	pCi/L				1	E907.0	08/21/08 13:47/eli-c
<b>TOTAL METALS ANALYSES</b>								
Mercury	ND	mg/L		0.0001		1	E245.1	07/09/08 12:14/eli-b
<b>DATA QUALITY</b>								
A/C Balance (± 5)	3.85	%				1	A1030 E	08/21/08 00:00/kl
Anions	66.6	meq/L				1	A1030 E	08/21/08 00:00/kl
Cations	72.0	meq/L				1	A1030 E	08/21/08 00:00/kl
Solids, Total Dissolved Calculated	4050	mg/L				1	A1030 E	08/21/08 00:00/kl
TDS Balance (0.80 - 1.20)	1.12					1	A1030 E	08/21/08 00:00/kl

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MDC - Minimum detectable concentration

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

Page 12 of 24